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Preface

China Payment System Development Report (Report) is one of the Financial Service Reports of the People's Bank of China (PBC) and has been issued for 7 editions since 2006. The *Reports* elaborate the achievements of China payment system during the 11th Five-Year Plan period. They have great value for readers who are interested in and devoted to researching the development of China payment system, particularly the institutions and individuals participating in the system development, and thus have attracted wide attention. In addition, the *Reports* facilitate the international community to understand the development of China payment system and strengthen the communication on payment systems between China and other economies.

The year of 2013 is the first year to implement the requirements of the 18th CPC National Congress and the Third Plenary Session of the 18th CPC Central Committee and also a critical year for the development of China payment system. Compared with previous *Reports*, the structure of this *Report* has been slightly adjusted. In Part III, the featured work carried out by banking institutions in payment and settlement area is added. It is the first time to demonstrate the practice of some banking institutions in the *Report*.

The *Report* is divided into four parts: Part I introduces the development and accomplishments of China payment system in 2013 in consolidation of legal basis, increase of service providers, development of financial market infrastructures, promotion of non-cash payment instruments, oversight of the payment system, improvement of rural payment service environment, international cooperation on payment and settlement, and outlook for the payment system. Part II describes the operation of financial market infrastructures in 2013 by analyzing a large number of data relating to payment systems, securities settlement systems and central counterparties to demonstrate major features and trends of the payment system. Part III presents featured achievements made by PBC branches in the promotion of Services Facilitating Cash Withdrawal with Bankcards in Rural Areas and mobile payment services, and management of payment business risks. In addition, it briefly introduces the practice of some banking institutions in promoting the use of electronic commercial drafts and improving payment business models etc.. Appendices in Part IV cover major events concerning payment system development in 2013, key indicators for payment system development, statements on key payment services, and a list of the payment institutions. Here we provide the English version of

Part I, II and IV (Appendix 4 excluded), and Special Topics.

We would like to express our sincere gratitude to relevant departments and branches of the PBC, China Foreign Exchange Trading System, China National Clearing Center, China UnionPay Co., Ltd., Shanghai Clearing House Co., Ltd., Clearing Center for City Commercial Banks, Rural Credit Banks Funds Clearing Center, China Central Depository & Clearing Co., Ltd. and China Securities Depository and Clearing Corporation Limited that have generously provided materials for the *Report*, and also to China Financial Publishing House that makes efforts to edit it.

Given the author's theoretical and practical limitations, we highly appreciate suggestions and comments from institutions, experts, scholars and people of all circles.

Li Yue
Director General of Payment and Settlement Department of PBC
April 8, 2014

List of Abbreviations

ABS	Accounting Banking System
ABS	Asset Backed Securities
ACH	Automatic Clearing House
ACS	Accounting Data Centralized System
BEPS	Bulk Electronic Payment System
CBGS	Central Bond Generalized System
CCCCB	Clearing Center for City Commercial Banks
CCDC	China Central Depository & Clearing Co., Ltd.
CCP	Central Counterparty
CFETS	China Foreign Exchange Trading System
CIS	Cheque Image System
CNAPS	China National Advanced Payment System
CNCC	China National Clearing Center
DFCDS	Domestic Foreign Currency System
DVP	Delivery Versus Payment
ECDS	Electronic Commercial Draft System
FFA	Forward Freight Agreement
HVPS	High Value Payment System
IBPS	Internet Banking Payment System
MIIT	Ministry of Industry and Information Technology
MPS	Ministry of Public Security
PBC	The People's Bank of China
PCAC	Payments and Clearing Association of China
RCBFCC	Rural Credit Banks Funds Clearing Center
SAFE	The State Administration of Foreign Exchange
SAIC	State Administration for Industry and Commerce
SD&C	China Securities Depository and Clearing Corporation Limited
SHCH	Shanghai Clearing House

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Part I

The Achievement of China Payment System in 2013

- Progress in Formulation of Rules
- Increase of Payment Service Providers
- Sound Development of Financial Market Infrastructures
- Steady Promotion of Non-cash Payment Instruments
- Intensified Oversight of the Payment System
- Improvement of Rural Payment Service Environment
- Furthered International Cooperation in Payment and Settlement Area
- Outlook for the Development of China's Payment System

1. Progress in Formulation of Rules

China's payment system made remarkable progress in the formulation of payment and settlement rules in 2013. The People's Bank of China (PBC) released relevant rules and operators of financial market infrastructures issued procedures in respect of bankcard acceptance, payment business provided by payment institutions and printing of bank notes etc..

PBC released *Administrative Measures on Bankcard Acceptance* (Notice [2013] No.9, referred to as *the Measures*). On July 5th 2013, PBC released *the Measures*, which specified the scope of the business and the standards for management of risks in verification of contracting merchants, business inspection, transaction monitoring, information security and fund settlement etc..

PBC issued *Administrative Measures on Depository of Funds of Payment Institutions' Clients* (referred to as *the Measures*). In order to strengthen the management of clients' funds, PBC issued *the Measures* on June 7th 2013. *The Measures* regulates the depository, accumulation, use and transfer of clients' funds, and stipulates the classification of depository banks, tiered management of accounts, the use of funds, verification of relevant information, adjustment of major supervisory indicators and joint supervision from PBC, self-disciplinary organization and banks.

PBC promulgated *Administrative Measures on Printing of Banks' Bills and Certificates* (referred to as *the Measures*). For the purpose to promote the reform and strengthen the management of the printing of banks' bills and certificates, PBC released *the Measures* on June 1st 2013. *The Measures* set up the management system that covers revision, platemaking, ordering and delivery of bills and certificates, and specify the rights and duties of PBC branches, printing enterprises and banking institutions respectively.

The State Administration of Foreign Exchange (SAFE) promulgated *Guidance on Pilot Project of FX Payment Service Provided by Payment Institutions to Facilitate Cross-border E-commerce* (referred to as *the Guidance*). In order to facilitate e-commerce, regulate internet payment services provided by payment institutions and mitigate risks triggered by cross-border fund transfer in FX, SAFE issued *the Guidance* on Feb. 1st 2013. It stipulates the criteria for the applicants, application procedures and business scope, and also specified the requirements for business, fund and risk management of the pilot.

PBC issued *Rules for Law Enforcement Inspection in Payment and Settlement Field* (referred to as *the Rules*). For the purpose to further regulate law enforcement inspection in payment and settlement area, PBC released *the Rules* on Sep. 4th 2013 which set up a standardized and normalized

mechanism and specify the executors, procedures, scope, content, organization and coordination of the inspections.

PBC issued *Verification Mechanism for the Funds of Payment Institutions' Clients* (referred to as *the Mechanism*). On Oct. 28th 2013, PBC issued *the Mechanism* which required payment institutions and their respective depository banks to perform reconciliation and ensured the consistency of the booking and relevant information for the purpose to ensure the safety of the fund.

PBC released *Notice on Requirements of Changes Made by Payment Institutions* (referred to as *the Notice*). On Jan. 8th 2013, the PBC released *the Notice* which specified the terms and procedures for payment institutions to change company name, registered capital or equity structure so as to prevent payment institutions from evading rules, transferring directly/indirectly or leasing the licenses.

PBC issued *Payment Statistical Indicators* (referred to as *the Indicators*). In order to improve the efficiency of payment data analysis and promote the development of the payment system in a scientific way, PBC issued *the Indicators* on May 8th 2013 which was comprised of 7 parts with 533 key points in total. *The Indicators* include *Design and Framework of the Indicators*, *Statistical Indicators of Payment Environment*, *Statistical Indicators of Payment Service Providers*, *Statistical Indicators of RBM Bank Settlement Account*, *Statistical Indicators of Payment Instruments*, *Statistical Indicators of Payment Systems* and *Coding Method and Code Structure of the Indicators*.

PBC promulgated *Notice on Strengthening the DVP Settlement in the Interbank Bond Market* (referred to as *the Notice*). For the purpose to enhance efficiency, mitigate risks, and thus promote the interbank bond market to develop in a healthy and specific way, PBC released *the Notice* to require the market participants to settle in DVP mode.

2. Increase of Payment Service Providers

Over these years, PBC, banking institutions, clearing institutions, payment institutions, securities settlement institutions and central counterparties had formed a complementary system to provide more and more specialized and market-oriented payment services.

2.1 Payment Service Providers

As the organizer, catalyst and overseer of China's payment system, PBC is entitled with the jurisdiction to ensure payment and clearing systems operate smoothly. High Value Payment System (HVPS), Bulk Electronic Payment System (BEPS), Cheque Image System (CIS), Domestic Foreign Currency Payment System (DFCPS), Electronic Commercial Draft System (ECDS) and Internet

Banking Payment System (IBPS) which are operated by PBC played an important role in facilitating fund transfer and supporting the economic and financial development.

In 2013, PBC's branches took measures to support the market participants to extend payment services and to strengthen the oversight of the payment service market. By the end of 2013, PBC had 1 head office in Shanghai, 8 branches, 2 operations offices, 6 branch operations offices, 20 central sub-branches in provincial capitals, 5 sub-provincial central sub-branches, 308 prefecture-level central sub-branches. Branches of PBC provided local clearing services by running local clearing systems.

Banking institutions are the major payment service providers. In 2013, pursuant to *the 12th Five-Year Plan of the Development and Reform of the Financial Industry*, banking institutions intensified the reform and opening policy and also promoted business improvement and upgrading. During the past year, the reform of policy banks, China Postal Savings Bank and rural credit cooperatives went steadily and the governance of the major commercial banks were improved.

By the end of 2013, banking institutions providing payment services in China were comprised of 2 policy banks, 5 state-owned commercial banks, 12 shareholding commercial banks, 145 city commercial banks, 468 rural commercial banks, 122 rural cooperative banks, 1803 rural credit cooperatives, 1 postal savings bank, 42 foreign financial institutions and 987 township banks.

Clearing institutions are active participants in retail payment service market and provide specific clearing services in certain areas. UnionPay had promoted wide cooperation with over 400 institutions world-wide and issued over 3.8 billion UnionPay cards. Its network has covered both urban and rural area of China and extended to over 140 countries/regions abroad.

Clearing Center for City Commercial Banks (CCCCB) developed featured products and services aiming to meet the demand of city commercial banks and township banks. By the end of 2013, CCCCCB had 203 participants.

Rural Credit Banks Funds Clearing Center (RCBFCC) had endeavored to implement *Administrative Measures on the Supervision of Rural Credit Banks Funds Clearing Center* by orienting to improve rural payment environment, ensuring the stable operation of its systems and strengthening its internal control and thus promoted the rapid development of its business. By the end of 2013, the clearing systems of RCBFCC had processed 350 million payment transactions with a total value of CNY 7.6 trillion.

Payment institutions, who provide diversified and tailored payment services via new technologies such as internet etc., are the important component in the retail payment service market. In July 2013, PBC approved the business application of 66 qualified non-financial institutions (53 institutions

made applications for the first time and 13 for additional business). By the end of 2013, 250 non-financial institutions got the payment license in total.

2.2 Post-trade Service Providers

Post-trade service providers mainly include China Central Depository & Clearing Co., Ltd. (CCDC), China Securities Depository and Clearing Corporation Limited (SD&C), Shanghai Clearing House (SHCH) and China Foreign Exchange Trading System (CFETS). Besides, PBC had developed and operated ECDS.

2.2.1 CCDC

CCDC is responsible for registration, depository and clearing of most bonds in the interbank bond market. It also provides technical support for PBC's open market operation system and bond issuing system and provides intermediary and information services for the bond market. In 2013, CCDC kept improving the governance and its main operating business grew steadily. CCDC extended the depository services, promoted the management of pledged vouchers, started physical delivery of government bond and futures and helped to advance pilot of asset backed securities. DVP settlement had been further improved. The capacity of fund settlement was greatly enhanced.

2.2.2 SD&C

SD&C is responsible for registration, clearing and delivery of securities and also provides multilateral clearing service for exchange-trade of securities. In 2013, SD&C ensured the safe and stable operation of its system. Meanwhile, SD&C fully supported the development of capital market by accelerating the preparation for OTC Bulletin Board, advocating relevant business innovation and promoting securities lending etc.. Generally speaking, SD&C's services had been extended and improved and its system strengthened.

2.2.3 SHCH

SHCH mainly provides RMB/FX clearing services for spot and OTC trading in the financial market. In 2013, the clearing volume of cash trading and the products kept growing and business scope kept expanding. DVP settlement had been fully adopted for bond trading.

2.2.4 CFETS

CFETS is responsible for supplying interbank FX trading, credit lending and bond trading system and organizing their market tradings. In April 2013, clearing service of CFETS was transferred to SHCH smoothly, and the efficiency of FX net clearing was advanced steadily. On Nov. 25

2013, interbank gold inquiry swap transaction went live. Market participants traded gold and sent confirmations by means of bilateral inquiry through foreign exchange trading system of CFETS and made settlement and delivery through Shanghai Gold Exchange.

3. Sound Development of Financial Market Infrastructures

In 2013, financial market infrastructures operated smoothly. Business scale kept growing, services were enhanced, infrastructure development promoted and maintenance and management improved.

The payment, clearing and settlement systems operated by PBC remained safe and stable. In 2013, payment systems of PBC^① processed 2.78 billion transactions with a total value of CNY 2 163.84 trillion, up by 34.98% and 15.85% respectively. Among them, transactions handled by HVPS achieved 0.59 billion in volume and CNY 2 060.76 trillion in value, BEPS 1.04 billion in volume and CNY 20.32 trillion in value, IBPS 0.71 billion in volume and CNY 9.47 trillion in value, ACH 0.42 billion in volume and CNY 68.29 trillion in value, DFCPS 1.39 million in volume and 715.11 billion dollars (CNY 4.43 trillion) in value, CIS 10.99 million in volume and CNY 539.23 billion in value.

In 2013, the construction of the payment systems operated by PBC made great achievement. PBC launched CNAPS II and CNAPS I was switched smoothly to CNAPS II.

In 2013, in line with the development of payment systems, China National Clearing Center (CNCC) strengthened management and took the following measures to ensure the sound operation of the payment systems: (i) master control center in Beijing and backup control center in Shanghai were constructed, which improved the layout and services of the payment system; (ii) monitoring and management systems such as operation monitoring system, maintenance management platform, production control auxiliary system, operation auxiliary system and the call center etc. were developed, which addressed the appeals of management and technical support of CNAPS II; (iii) standardization of maintenance was promoted, the quarterly examination performed, and emergency management strengthened, which largely enhanced the maintenance services.

By the end of 2013, the payment systems remained stable and the overall system availability ratio had reached 99.992%. The system availability ratio of HVPS, BEPS, IBPS, CIS and DFCPS was 99.998%, 99.997%, 99.998%, 99.998% and 99.965% respectively.

^① The systems include HVPS, BEPS, IBPS, ACH, DFCPS and CIS.

Business scale of UnionPay Interbank Bankcard Clearing System kept rising. In 2013, the system processed 15.1 billion transactions with a total value of CNY 32.3 trillion, up by 21.2% and 48.4% respectively compared with those of last year. Thereinto, transactions via ATM amounted to 6.6 billion in volume and 3.6 trillion in value, up by 12.6% and 28% respectively. Transactions via POS amounted to 7.8 billion in volume and 23.8 trillion in value, up by 24.8% and 44.5% respectively.

In 2013, operation support capacity of UnionPay Interbank Bankcard Clearing System was strengthened: (i) the core on-line system could handle over 10 000 transactions per second at peak; (ii) application node, server, storage, encryption equipment and network devices of the system adopted redundancy design; (iii) automated switch became possible in case of any equipment breakdown and business would be recovered rapidly; (iv) two systems backing up each other were available in the production center and any systematic failure could be recovered due to quick and automated switch between them.

The business of CCCC kept growing steadily. In 2013, systems of CCCC processed 793 thousand transactions with a total value of CNY 224.7 billion, up by 102.45% and 43.37% respectively year on year.

In 2013, CCCC kept promoting system development and improving payment and clearing services. The cashless draw-back of clearing fund by participants and reexchange of fund transfer became possible. CCCC integrated Draft Processing System with Payment and Clearing System.

Systems of RCBFCC ran stably with rapid growth in transaction volume and value. In 2013, the rural cooperative financial institutions (including rural commercial banks) processed 121.5 million transactions through the systems of RCBFCC with a total value of CNY 2.46 trillion, up by 40.23% and 22.55% respectively compared with those of the year before.

In 2013, the availability ratio of the systems reached 99.997% with no major disruptions and the success ratio of real-time transactions reached 99.14%, higher by 0.137 and 2.14 percentage points than expected.

Central Bond Generalized System (CBGS) operated steadily. In 2013, CBGS operated smoothly in general. The total volume of bond depository rose steadily, transaction volume increased narrowly and the scale of DVP settlement was expanding. In 2013, bond redemption and spot trading settled amounted to CNY 270.82 trillion in value, up by 1.15% year on year. The number of settlement members of interbank bond market who adopted DVP settlement kept rising. The transactions settled in DVP mode achieved 1.1 million in volume and 309.91 trillion in value, up by 19.84% and 3.07% respectively. The number of government bonds, financial bonds, enterprise bonds, medium-term notes, central bank notes, commercial bank bonds and ABS which made coupon payment via CBGS was 3 690, amounting to CNY 4.43 trillion.

Physical delivery of treasury bond futures became available. The transactions were 434 in volume and CNY 0.43 billion in value. 10 issues of savings treasury bonds were registered, issued and monitored and the issuance value amounted to CNY 216.9 billion up by 41.8% on a year-on-year basis. Collateral management service was further promoted and nearly 2 000 institutions/product accounts got access to the management system. CCDC handled 86 transactions of pledge and reimbursement (222 issues) and pledged value amounted to CNY 24 billion. Meanwhile, CCDC supported 534 bond issuances by tender and the bidding amount was CNY 4.2 trillion in value, up by 94.9% and 7.9% respectively. CCDC helped Ministry of Finance with time deposit of treasury cash in commercial banks for 10 issues and the pledged bonds amounted to CNY 430 billion. Besides, CCDC provided relevant bond information disclose services for tenders 14 000 times in 2013. Also, CCDC initiated the 3rd round promotion of direct access terminals and 56 institutions got direct access to CBGS.

The securities registration and settlement system operated stably. In 2013, the securities registration and settlement system operated smoothly. The gross transaction value of the year reached CNY 355.3 trillion and the net value reached CNY 13.62 trillion.

SD&C had taken the following measures to promote the development of securities infrastructures: improved technical service management system in the guidance of ISO 20000 to standardize, normalize and refine management and enhanced the operation safety of the system by evaluating protection rating, modifying power supply system of server room, upgrading the network and establishing local backup; initiated uniform securities account technical platform and was developing independent securities registration and settlement system; developed technical system of securities lending collateral management and renewed settlement participants' management platform I; made preparations for the operation of enterprise data repository, performed research and planning of industry data repository, promoted backup system of data repository and non-trade information exchange platform.

SHCH had rapidly expanded in services scope and business scale. By the end of 2013, the registration and settlement system of SHCH had provided services for 11 innovated products such as credit risk mitigation warrant, super short-term commercial paper and asset-backed notes of non-financial enterprises. The scale of bond issuance and depository kept ascending. In 2013, the par value of newly issued RMB bonds registered and deposited in SHCH reached CNY 2.78 trillion, up by 47.06% year on year. Besides, a medium-term note with the par value of 0.2 billion dollars was issued. Cashed bonds amounted to CNY 1.8 trillion and the balance of deposited bonds CNY 2.69 trillion, up by 197.7% and 57.62% respectively.

In 2013, the clearing services of CCP and spot trading were expanding rapidly. In 2013, spot trading cleared reached CNY 5.24 trillion and repurchase cleared CNY 5.59 trillion. Net clearing members of spot trading increased from 53 in 2012 to 58 in 2013.

The foreign exchange net clearing business was running steadily. Since April 12th 2013, SHCH had been providing net clearing services for RMB/FX spot inquiry trading, forward trading and swap trading. By the end of 2013, the number of clearing members engaged in FX auction trading had reached 249 and that engaged in FX inquiry trading 26.

On April 16th 2013, central clearing for RMB Forward Freight Agreement (FFA) went live and the clearing products included Capesize Time-Charter (CTC), Panamax Time-Charter (PTC) and Supramax Time-Charter (STC). By the end of 2013, 3 clearing members, 6 RMB FFA agents and 132 freight companies had engaged in the business.

The confirmation of interbank gold inquiry trading went well. Interbank gold inquiry trading was promoted by CFETS and Shanghai Gold Exchange in December 2012. In 2013, CFETS started trade confirmation service for the business which operated well and got positive market feedback by the end of 2013.

Under the trading rules, gold inquiry tradings concluded via the foreign exchange trading system of CFETS are confirmed on the post-trade processing platform. CFETS sends the data confirmed by both sides of the deal to Shanghai Gold Exchange and the latter then makes settlement accordingly.

In 2013, transactions handled by post-trade processing platform were 638 in volume. Among them, there were 519 spot transactions, 97 forward transactions and 22 swap transactions.

Column 1

CNAPS II Going Live

At the end of 2009, PBC initiated the development of CNAPS II following the law of the operation of information system. After careful deliberation and persistent efforts of PBC, banks and other relevant parties, CNAPS II went live in October 2013. CNAPS II aims to address the increasing and diversified interbank payment appeal of the society, accommodate the adjustment of operation management by commercial banks and adapt to the development of the financial market. It introduces advanced conception in payment system management, promotes the functions, enhances clearing efficiency, extends business scope, strengthens operation monitoring and improves the disaster recovery systems.

PBC gave adequate consideration to the status quo of the payment system in China and benefited from the advanced experience of payment systems world-wide while developing CNAPS II. Improvements had been made in 6 aspects compared with CNAPS I.

(i) Single Addressee

Before the launch of CNAPS II, provincial branches of commercial banks had to open accounts so as to get access to CNAPS I. CNAPS II supports single addressee of banks. Hereby, the head office and branches of a commercial bank can handle transactions via a single account opened by the legal entity, which promotes efficiency, saves the banks' liquidity and enhances the efficiency of their use of fund. Besides, it will be easier for fund management departments of banks' head offices to monitor overall liquidity and allocate fund more flexibly.

(ii) Improving liquidity management

Liquidity risk is a major risk of payment systems. The failure to make timely payment by an institution might trigger domino effect and restrain the payment of other institutions. CNAPS II improves liquidity management and enhances clearing efficiency by matching transactions in the queue for HVPS and transferring fund automatically from the clearing account of head office to that of branches.

(iii) Supporting the interbank processing of on-line payment

Customers can learn whether fund is successfully transferred in real-time after they make interbank payment via internet bank or ATMs, which helps to improve customer experience and promote the development of e-commerce.

(iv) Enhancing the efficiency of system operational maintenance

The risk alert capacity and operational monitoring efficiency are greatly enhanced. The system has become more safe and stable.

(v) Sounder system backup

The structure of operation center, remote backup center and local data backup center improves the systems' recovery capacity, which ensures business continuity, data integrity and safety in case of contingencies.

(vi) Adopting international message format

CNAPS II adopts ISO 20022, which facilitates interoperability among different systems.

Column 2

Pilot of Accounting Data Centralized System Being Successful

Accounting Data Centralized System (ACS) is the core supporting system for PBC to fulfill the duties. As the operational basis of CNAPS II, it provides final fund settlement for payment

systems. ACS supports lending and deposit for financial institutions, currency supply and withdrawal, cash receipt and payment, open market operation, pledged financing, fund transfer and clearing, and internal financial accounting etc..

For the purpose to enhance the efficiency and stability of the payment system, PBC developed ACS while maintaining sound operation of Accounting Booking System (ABS). The most obvious improvement of ACS compared with ABS is that ACS supports nation-level data storage, centralized processing and real-time monitoring, which promotes business processing efficiency and risk management.

Over years of hard work, core application and information management subsystems of ACS went live in Beijing, Shandong, Hubei, Hebei and Shanxi in 2013 in succession, indicating that central bank's accounting system is getting more centralized, electronic and scientific. Meanwhile, ACS provides basic information for PBC to facilitate the implementation of monetary policies, mitigate risks and maintain financial stability.

In addition, comprehensive front-end subsystem of ICBC, CCB and Qilu Bank had gone live in Beijing and Shandong. The subsystem handles general deposit, treasury deposit, electronic check and electronic receipt via internet for financial institutions for the first time.

ACS is one of PBC's meaningful endeavors to serve the society and improve financial services. It helps PBC to improve accounting service, risk management and information integration, and helps financial institutions to foster the efficiency of fund use and liquidity management. The system had been operating smoothly, and business had been accurately processing ever since the pilot run. Centralized processing proves to be more efficient.

Next, PBC will further strengthen the management over central bank accounting and maintenance of ABS and ACS, promote ACS nationwide and take measures to ensure the smooth migration from ABS to ACS. After rolling out nationwide, ACS and CNAPS II will provide better payment and clearing services for financial institutions.

4. Steady Promotion of Non-cash Payment Instruments

In 2013, 50.16 billion non-cash transactions were processed with a total value of CNY 1 607.56 trillion, up by 21.92% and 24.97% respectively compared with those of the year before. The growth rate of transaction volume and value increased by 0.32 percentage point and 8.47 percentage points respectively.

4.1 Bills

Transactions settled by bills witnessed decline. In 2013, 693 million transactions were settled by bills with a total value of CNY 287.7 trillion, down by 11.61% and 2.93% respectively compared with those of the year before. Among them, transactions of cheque amounted to 667 billion in volume and CNY 259.56 trillion in value, down by 11.77% and 3.43% respectively on a year-on-year basis; commercial draft settled amounted to 16.3 million in volume and CNY 18.24 trillion in value, up by 4.98% and 13.57% respectively on a year-on-year basis; bank draft was 3.77 million in volume and CNY 2.16 trillion in value, down by 19.63% and 20.14% respectively on a year-on-year basis; transactions of bank promissory note amounted to 6.26 million in volume and CNY 6.03 trillion in value, down by 12.9% and 15.14% respectively on a year-on-year basis.

Electronic commercial draft transactions kept growing. By the end of 2013, the number of ECDS participants had reached 359, increasing by 18 compared with that of past year. In 2013, 520 900 drafts were issued by ECDS with a total value of CNY 1.59 trillion, up by 70.93% and 69.06% respectively year on year. 534 700 drafts were accepted with a total value of CNY 1.63 trillion, up by 71.45% and 68.87% respectively year on year. 134 300 drafts were discounted with a total value of CNY 640.5 billion, up by 42.39% and 64.91% respectively year on year. 250 900 drafts were rediscounted with a total value of CNY 1.95 trillion, up by 119.14% and 199.27% respectively year on year.

4.2 Bankcard

The number of bankcard issued kept climbing. By the end of 2013, 4.2 billion bankcards had been issued, up by 19.23% compared with last year and the growth rate slumped by 0.61 percentage point. Thereinto, 3.8 billion debit cards were issued, up by 19.36% year on year. 391 million credit cards were issued, up by 18.03% year on year and the growth rate rose by 2.03 percentage points. The ratio of issuance volume between debit cards and credit cards was 9.78 : 1, slightly increasing compared with that of last year. By the end of 2013, the number of bankcard per capita was 3.11, up by 17.8% year on year. Thereinto, the number of credit card per capita reached 0.29, up by 16% year on year.

The acceptance environment got improved. By the end of 2013, merchants linked to UnionPay Interbank Bankcard Clearing System had reached 7.63 million, POS terminals 10.63 million and ATM 520 000, up by 2.8 million, 3.51 million and 104 400 respectively on a year-on-year basis. As of the end of 2013, the ratio between bankcard volume and ATM volume was 8104:1, down by 4.71% on a year-on-year basis. The ratio between bankcard volume and POS volume was 396:1, down by 20.25% on a year-on-year basis.

Transactions processed by bankcard kept increasing. In 2013, 47.6 billion transactions were processed by bankcard with a total value of CNY 423.36 trillion, up by 22.31% and 22.28%

respectively year on year. The growth rate of transaction volume went down by 0.14 percentage point, but that of transaction value went up by 15.38 percentage points. Average transaction per day reached 130.4 million in volume and CNY 1.16 trillion in value. Whereby, there were 7.9 billion cash deposit through bankcard with a total value of CNY 66.61 trillion, up by 17.01% and 15.42% respectively on a year-on-year basis, 18.1 billion cash withdrawal through bankcard with a total value of CNY 70.8 trillion, up by 12.29% and 15.37% respectively on a year-on-year basis, 12.97 billion consumption through bankcard with a total value of CNY 31.83 trillion, up by 43.98% and 52.85% respectively, 8.6 billion fund transfer through bankcard with a total value of CNY 254.12 trillion, up by 22.65% and 23.17% respectively.

Consumption via bankcard climbed rapidly. In 2013, average consumption amount per card was CNY 7 554 and average consumption amount per transaction reached CNY 2 454, up by 28.16% and 6.14% respectively year on year. Interbank consumption achieved 6.8 billion in volume and CNY 23.75 trillion in value, up by 22.54% and 44.08% respectively year on year. The interbank consumption accounted for 52.4% in volume and 74.61% in value of the total bankcard consumption. The bankcard penetration rate reached 47.45%, 3.95 percentage points higher than last year.

The growth of total outstanding balance of credit cards slowed down and credit usage rate^① went up. By the end of 2013, the aggregate credit line had been CNY 4.57 trillion, 31.17% higher than that of the year before. The outstanding credit balance reached CNY 1.84 trillion, 61.8% higher than the year before. The average credit line per card achieved CNY 11 700 and credit usage rate 40.29%, up by 7.63 percentage points year on year. The outstanding credit balance overdue more than half a year was CNY 25.2 billion and increased by CNY 10.5 billion (71.86%) compared with that of the year before. It accounted for 1.37% of the total outstanding balance, 0.08 percentage point higher than the year before.

4.3 Settlement Means

Settlement by means of remittance increased rapidly. In 2013, 1.9 billion settlements were made by means of remittance, consignment of collection and consignment of acceptance etc. with a total value of CNY 896.5 trillion, up by 29.52% and 39.27% respectively on a year-on-year basis. The growth rate of the volume and value rose by 9.67 percentage points and 5 percentage points respectively. Whereby, 1.8 billion settlements were made by means of remittance with a total value of CNY 880.42 trillion, up by 30.28% and 39.97% respectively, and accounted for 98.28% in volume and 98.21% in value of the total. The growth rate of its volume and value went up by 10.04 percentage points and 5 percentage points respectively.

^① Credit usage rate refers to the ratio of outstanding credit balance to aggregate credit line.

4.4 E-payment^①

In 2013, internet payment and mobile payment developed rapidly. 25.8 billion e-payments were made with a total value of CNY 1 075.16 trillion, up by 27.4% and 29.46% respectively year on year. Thereinto, 23.7 billion internet payments were made with a total value of CNY 1 060.78 trillion, up by 23.06% and 28.89% respectively on a year-on-year basis. 435 million fixed-line phone payments were made with a total value of CNY 4.74 trillion, down by 6.59% and 8.92% respectively on a year-on-year basis. 1.67 billion mobile payments were made with a total value of CNY 9.64 trillion, up by 212.86% and 317.56% respectively on a year-on-year basis.

5. Intensified Oversight of the Payment System

5.1 Market Access Further Regulated

In accordance with relevant rules, PBC approved the business application of 66 qualified non-financial institutions (53 institutions made applications for the first time and 13 for additional business). By the end of 2013, 250 non-financial institutions had got the payment license in total.

PBC coordinated with SAFE to set up joint supervisory mechanism. After consulting with PBC, SAFE issued *Guidance on Pilot Project of FX Payment Service Provided by Payment Institutions to Facilitate Cross-border E-commerce* (to as referred *the Guidance*) in Feb. 2013. *The Guidance* allows qualified payment institutions to engage in cross-border FX payment services in Beijing, Shanghai, Zhejiang, Chongqing and Shenzhen. PBC gave opinions on the business plans of the 17 payment institutions and helped them regulate their cross-border payment services.

5.2 Supervision over the Market Strengthened

5.2.1 Intensifying oversight of payment and settlement services of commercial banks

In order to intensify oversight of payment and settlement services of commercial banks, PBC: (i) urged commercial banks to improve internal control; (ii)carried out on-site supervision and off-site inspection and timely released risk alerts;(iii)shared information with SAIC, MPS and MIIT and reinforced the cooperative governance mechanism to combat bankcard crimes; (iv)organized the

^① E-payment in this report refers to payment business initiated via e-channels. It mainly includes internet payment, fixed-line phone payment and mobile payment.

implementation of real-name system and promoted the reform of RMB bank account system; (v) completed the verification of individual RMB bank deposit account; (vi) finished the consultation of *Rules on Management of RMB Bank Account* and its implementation measures.

5.2.2 Strengthening supervision over clearing institutions

PBC released *Administrative Measures on Supervision of Rural Credit Banks Funds Clearing Center* (Yinfa [2013] No.30) to regulate the governance of RCBFCC, urge it to improve internal risk control, guide its strategy planning and business development and verify its bank accounts. Also, PBC promoted the increase of paid-in capital of RCBFCC and CCCC.

5.2.3 Improving regular supervision of payment institutions

PBC strengthened supervision over the changes made by payment institutions to prevent the transfer (directly or indirectly), lease or lending of payment license through illegal changes. PBC made payment statistical analysis and promoted the role of statistics in industry supervision. Meanwhile, PBC investigated a dozen of claims so as to protect the interests of consumers and maintain the order of the payment service market. In 2013, PBC released *Administrative Measures on Depository of Funds of Payment Institutions' Clients* and *Verification Mechanism for the Funds of Payment Institutions' Clients* to regulate deposit, collection, use and transfer of clients' funds, perform the reconciliation between payment institutions and depository banks and protect the safety of clients' funds.

5.3 On-site Inspection Well Performed

From February to October of 2013, PBC organized the branches to carry out comprehensive and ad hoc inspections (including inspections on bankcard acceptance service and budget unit bank settlement account service) in the payment and settlement area. The inspections worked out well, propelled the payment and settlement services of commercial banks to develop in a regulated way, enhanced the compliance and risk awareness of payment institutions and promoted the implementation of relevant policies.

In February 2013, PBC promulgated *Handbook of On-site Inspections on the Payment and Settlement Services Provided by Banking Institutions* as reference for PBC's branches. Also, PBC issued *Rules for Law Enforcement Inspection in Payment and Settlement Field* to set up a standardized and normalized mechanism and specify procedures, content, organization and coordination of the on-site inspection. Meanwhile, PBC compiled *Handbook of On-site Inspection on Payment Institutions* to give guidance to the branches, help payment institutions to comprehend relevant policies and improve their compliance and risk awareness.

5.4 Case Investigation Intensified

The cooperative mechanism to investigate and handle major cases or risk events were established. In terms of the cases in the payment and settlement area, the mechanism is as below. The audit authorities give clues beforehand; then the public security authorities make investigations with PBC's assistance, afterwards PBC initiates administrative inquiry and holds relevant parties responsible for their wrong doings. In 2013, PBC, along with relevant authorities, investigated and closed a dozen of major cases and risk events and sanctioned the institutions for their illegal activities. Thereinto, PBC investigated the banks and payment institutions involved in *lufax.com case* and imposed administrative penalties such as circulating a notice of criticism and fines. Also, PBC performed on-site inspection on the banks and payment institutions engaged in credit card fraudulence, and then issued notice and risk alert.

Column 3

The 2013 On-site Inspection of Payment and Settlement Services Carried Out

PBC organized on-site inspection on banking institutions and payment institutions of their payment and settlement services in 2013 for the purpose to maintain the safety and stability of the payment system, strengthen management of bank settlement accounts and regulate the market of bankcard acceptance. The inspections worked well.

36 provincial and sub-provincial branches of PBC carried out comprehensive and ad hoc inspections. Thereinto, ad hoc inspections covered unit bank settlement accounts and bankcard acceptance services. 3 361 working groups were initiated and the task force amounted to 339 306 (person×day). 14 381 outlets from 409 banks and 327 outlets from 41 payment institutions were inspected. The administrative penalty imposed totaled CNY 13.8 million.

I. Comprehensive inspection of payment and settlement services and the ad hoc inspection of unit bank settlement accounts

Generally speaking, the inspected financial institutions abided by relevant rules and policies by and large. Their internal control mechanism was in place, job allocation reasonable and staffs well arranged.

Nevertheless, there were still issues to be addressed: (i) the procedures to open or close an account of some commercial banks were incorrect; (ii) some banks did not get the approval of PBC or Ministry of Finance before they opened or closed a unit bank settlement account; (iii) payment

business was handled via sub-account; (iv) the trade substance related to the acceptance or discount of commercial drafts was not strictly reviewed; (v) some commercial banks refused or delayed to meet the bills; (vi) some commercial banks did not book the record timely for their clients.

II. Ad hoc inspection of bankcard acceptance

Some issues need to be highlighted: (i) some acquirers, esp. payment institutions, did not implement real name system; (ii) some acquirers embezzled MCC with low interchange fees; (iii) some used individual accounts for the purpose of legal entities' settlement accounts; (iv) the contractors were not well managed; (v) the installment of mobile POS went beyond the permitted scope; (vi) the monitoring of transaction risks was not good enough. All in all, the market of bankcard acceptance should be further regulated.

To solve the problems discovered in the law enforcement inspections, PBC followed the principles to punish on one side and educate on the other side, and took the measures such as dialogue, circulation of a notice of criticism and administrative penalty etc.. Thereby, the business operation of the inspected institutions was more regulated and their awareness of compliance management further improved.

Column 4

Promoting Market-oriented Reform and Strengthening the Oversight of Bankcard Acceptance

Over the decade, the business scale of the bankcard industry had been climbing. With the diversification of bankcard market participants, the oversight of the business faced with new challenges. Ever since 2005, PBC, alone or with other authorities, had released a chain of regulatory documents concerning the order of bankcard acceptance market and management of relevant risks, which promoted the bankcard market to develop in a healthy way. Whereas, these documents are not enough to cope with the new situation or address the new challenges as they are purely targeted at commercial banks and limited to traditional offline business.

Since June 2010, PBC had invited relevant parties to deliberate about the status quo and problems of bankcard acceptance market many times. The guideline and principles to supervise the business took shape. Afterwards, PBC drafted *Administrative Measures on Bankcard Acceptance (consultative)* and published it on the websites of Legislative Affairs Office of the State Council and PBC to seek opinions from the public in June and July of 2012. Reasonable suggestions were adopted after careful deliberation.

On July 5th 2013, PBC released *Administrative Measures on Bankcard Acceptance* (referred to as *the Measures*). *The Measures* addresses the appeals of market-oriented reform and reduces administrative interventions as much as possible. Aiming to promote a fair, orderly and open market, *the Measures* (i) stipulates general principles for the business rules and risk management requirements that the market participants shall follow; (ii) makes no restrictive rules concerning the details of business operation that could already be bound by industry discipline and commercial agreements or guided by market force; (iii) grasps the essence of risk supervision and the business substance, raises universal requirements for core risk control and management, and reflects the principles, stability and prospectiveness of rules; (iv) leaves room for associations, clearing institutions and acquirers to formulate self-disciplinary compliance, business rules and operational rules based on the general principles so as to address the needs of business innovations; (v) specifies the rights and obligations of acquirers (commercial banks and payment institutions) and other participants such as merchants, issuance banks and clearing institutions. The two types of acquirers as mentioned above shall be treated equally, abide by the same rules, fulfill equivalent responsibilities concerning risk management and be subject to the same penalties for the same illegal activities. This will benefit business risk supervision and maintain a level-playing field for the participants.

The Measures clearly defines the nature of bankcard acceptance, specifies the applicable scope, regulates the due diligence of merchants, business inspection, transaction monitoring, protection of information security and fund settlement, and establishes a distinct supervisory framework and penalty mechanism. Thereby, a comprehensive management system comprising of the supervision from the government, self-discipline from the associations and internal control from market participants is developed.

Column 5

The Identity Verification of Individual RMB Deposit Accounts Completed

The real name system of bank accounts is a fundamental financial arrangement in China and critical for anti-corruption moves. For the purpose to further promote the real name system, PBC organized the identity verification of individual RMB deposit accounts (referred to as “the verification”) from 2011 to 2013. The verification, which strengthens the management of bank accounts and implements the real name system, is of great importance and casts profound impact.

I. Protecting people’s legitimate rights

With the rapid economic and financial growth in China, bank account services have been widely

accepted. Enterprises and individuals are more and more inclined to use bank accounts for transactions, payroll, investment and consumption etc.. The implementation of the real name system can provide legal protection for people's good money, enhance the security of their assets and thus protect people's legitimate rights.

II. Preserving financial order and promoting the development of social credit system

Bank accounts are the beginning and the end of fund movement, the basis of economic operation and help to prevent and combat illegal activities in economic area. The verification ensures the capital flow to get under the scrutiny of banks, which is helpful to the combat against illegal activities such as bribery, financial fraud and money laundering through fake, pseudonymous and anonymous bank accounts. Also, it prompts enterprises and individuals to use authentic ID for business which promotes the development of social credit system.

III. Propelling banking institutions to improve internal control

The verification can enhance bank employees' awareness of the real name system. They will be more aware of the obligation to implement it. Furthermore, they will know their clients and keep improving internal risk control mechanism so as to promote the banks to develop in a sustainable and healthy way.

By now, the verification is completed. According to statistics, the individual RMB bank accounts had achieved 2.5 billion by the end of 2013. Thereinto, 2.35 billion accounts needed to be verified and 122 million accounts were beyond the verification scope because there were no transaction via these accounts over the past 3 years or longer. Among the accounts to be verified, 2.34 billion had already been verified, 99.54% of the total. For the accounts verified, 1.46 billion were authentic accounts and 11 million were fake, pseudonymous or anonymous accounts. 470 million accounts were closed during the verification and 395 million accounts could not be verified. The accounts that had not been verified amounted to 11 million, 0.46% of the total accounts should be verified.

6. Improvement of Rural Payment Service Environment

6.1 Campaigns and Phased Recaptions

PBC complied *Album of Payment and Settlement Services in Rural Area*, organized interviews in some regions, opened columns on PBC's official website and in *Financial News* to introduce the work done to improve rural payment service environment.

6.2 The Awards for the Outstanding Performance

Pursuant to the work plan of the phased recaption and awards, PBC granted awards to 464 entities and 568 individuals that had excellent performance in the improvement of rural payment service environment from 2009 to 2012.

6.3 Field Research

In order to learn the rural payment service environment, PBC sent staff to carry out field research in Shandong, Gansu and Heilongjiang provinces.

6.4 The Formulation of Guidelines

PBC retrospected on the experiences and lessons gained from the past activities, deliberated on the arrangements to further promote the development of rural payment service environment and posed suggestions for the problems identified.

7. Furthered International Cooperation in Payment and Settlement Area

In 2013, PBC actively promoted international cooperation in payment and settlement area. Cross-border cooperation and oversight of the payment system were furthered.

PBC attended the 4 regular meetings held by Committee on Payment and Settlement Systems (CPSS) and the meetings held by steering group of the CPSS-IOSCO review of standards in 2013. The meetings mainly discussed the progress in payment and settlement area, the implementation of *Principles of Financial Market Infrastructures (PFMIs)* and oversight issues. Also, PBC translated and published *PFMIs* and promoted the implementation of the principles in China. PBC participated in SWIFT supervision forums which specified the supervisory obligations of the members. Besides, as the chairman of Working Group on Payment and Settlement Systems for Executives' Meeting of East Asia and Pacific Central Banks (EMEAP-WGPSS), PBC organized the 28th Bangkok meeting and the 29th Seoul meeting. In addition, PBC carried out the survey of financial inclusion in EMEAP countries.

PBC actively promoted bilateral cooperation in payment and settlement area by:(i) holding the 4th PBC-ECB bilateral meeting to share experience in retail payment development, oversight of the payment system, RTGS system, collateral management and securities settlement systems;

(ii) attending the 5th meeting between PBC and the central bank of Mongolia to address the concern about payment services provided to Mongolia; (iii) participating in Cross-Border Settlement Infrastructures Forum and Pan-Asian CSD Alliance Task Force Meeting to discuss the development of cross-border infrastructures, the globalization of RMB and the development of the bond market.

8. Outlook for the Development of China's Payment System

8.1 Accelerating the Consolidation of Rules and Regulations in Payment and Settlement

PBC will (i) steadily promote the formulation of rules regulating bankcard clearing market and facilitate its open-up; (ii) release *Administrative Measures on Domestic Letter of Credit* (revised), *Administrative Measures on Risk Reserve of Payment Institutions*, and *Administrative Measures on Participants of Payment Systems*; (iii) promote bank account reform and the release of *Regulations on Management of RMB Bank Accounts*; (iv) promulgate rules to regulate the development of e-payment and the management of relevant risks duly.

8.2 Promoting the Development of Financial Market Infrastructures and ACS

PBC will (i) promote the roll-out of CNAPS II nationwide, and organize the participants (legal entities) to adopt the message format of CNAPS II in batches by the end of 2014; (ii) roll out ACS smoothly; (iii) initiate the charging arrangement of IBPS and guide the participants to use the system wisely so as to promote the business to develop in a healthy and orderly way.

8.3 Encouraging the Use of Non-cash Payment Instruments

PBC will: (i) strengthen the management of bank notes to prevent risks and drive the business to develop healthily; (ii) roll out ECDS nationwide, improve the circulation environment and advance finance corporations' pilot run of on-line clearing for electronic commercial drafts so as to foster their use; (iii) promote the integration of social management function in bankcard and support relevant authorities to foster the use of credit cards for central budget units and bankcards for students from high schools to withdraw subsidies; (iv) follow the trends in mobile payment market, release policies to encourage the development of the industry when time is ripe, retrospect on the experience gained from the pilot in rural areas and promote the good business mode nationwide.

8.4 Strengthening the Oversight of the Payment System

PBC will (i) set up a working group to evaluate risks of the payment system; (ii) establish the report and cooperation mechanism of major risk events with relevant authorities, initiate administrative investigation after the detective work of the public security authority is done and strictly punish the institutions violating the rules; (iii) intensify the combat against bankcard crimes, strengthen on-site inspection and off-site supervision, release risk alerts timely, urge commercial banks to improve internal control and reinforce the management of bankcard related businesses; (iv) strengthen the joint mechanism to combat bankcard crimes and enhance cross-department supervision by promoting information exchange and cooperation with relevant authorities; (v) continue to foster the supervision over UnionPay, RCBFCC and CCCCB; (vi) promote non-financial institutions' access to the payment market under the guideline of balancing the prevention of risks and promotion of innovation and urge payment institutions to intensify compliance and risk management; (vii) complete the verification of identities of individuals opening RMB bank settlement accounts.

8.5 Promoting On-site Inspections in Payment and Settlement Area

PBC will release *Manual of Payment and Settlement on-site Inspection in Payment Institutions*, organize relevant trainings, inspect bankcard acquiring business continuously inspect payment institutions' management of clients' funds in good time, and advance the use of electronic tools for the inspection.

8.6 Reinforcing the Development of Rural Payment Service Environment

PBC will (i) establish a tiered, cost efficient and sustainable rural payment service system and lay solid basis for the financial integration between rural and urban areas pursuant to the guidelines of supporting patronizing and enriching the farmers and fostering city and countryside integration raised in the 18th National Congress of CPC; (ii) issue guiding opinions to promote the development of rural payment service environment and organize the pilot run; (iii) retrospect on the experience of the promotion of mobile payment in rural areas and explore effective business modes.

8.7 Intensifying International Cooperation in Payment and Settlement Field

PBC will actively (i) participate in the meetings of CPSS, EMEAP-WGPSS and SEACEN; (ii) perform the job of payment systems working group of China-Russia and China-Kazakhstan Financial Cooperation Subcommittee; (iii) maintain bilateral cooperative mechanism with HKMA and ECB respectively; (iv) promote cooperation with neighboring countries in the field of payment and settlement.

Part II

Analysis of Operation of Financial Market Infrastructures

- Payment Systems
- Securities Settlement Systems
- Central Counterparty

1. Payment Systems

In 2013, the transaction of payment systems continued to grow steadily. All kinds of payment systems^① processed 28.8 billion transactions with a total value of CNY 2 939.61 trillion, increased by 29.65% and 17.24% compared with those of last year respectively. HVPS of PBC and intra-bank payment systems of banking institutions had remained dominant in the payment transaction activities.

Table 1 Transactions Processed by Payment Systems in 2013

Unit: million transactions/CNY 100 billion/%

Category	Transaction		Percentage	
	Volume	Value	Volume	Value
HVPS	595.49	20 607.63	2.07	70.10
BEPS	1 040.27	203.15	3.61	0.69
CIS	10.99	5.39	0.04	0.02
IBPS	717.84	94.68	2.49	0.32
ACH	419	682.9	1.45	2.32
Intra-bank Payment Systems of Banking Institutions	10 758	7 452.3	37.35	25.35
UnionPay Interbank Bankcard Clearing System	15 140	323	52.56	1.10
Draft Processing System and Payment & Clearing System for City Commercial Banks	0.79	2.25	0.00	0.01
Payment & Clearing System for Rural Credit Banks of RCBFCC	121.53	24.66	0.42	0.08

Note: The total number of volume and value percentages are not equal to 100% because of rounding.

1.1 Payment Systems of PBC

1.1.1 HVPS and BEPS of PBC

In 2013, HVPS and BEPS of PBC processed 1.64 billion transactions with a total value of CNY 2 081.08 trillion, up by 33.47% and 16.23% year on year respectively, both of which continued to represent a rapid growth in scale.

^① Payment systems include HVPS, BEPS, CIS, IBPS, ACH, intra-bank payment systems of banking institutions, UnionPay Interbank Bankcard Clearing System, Draft Processing System and Payment and Clearing System for City Commercial Banks, Payment and Clearing System for Rural Credit Banks of RCBFCC and DFCCPS.

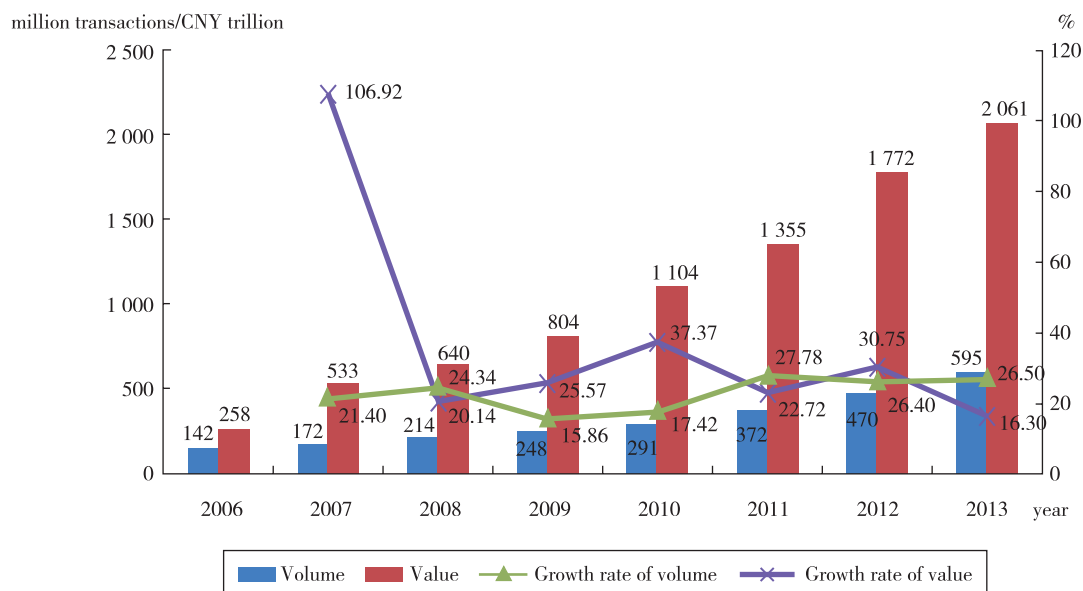
Table 2 Transactions Processed by HVPS and BEPS of PBC

Unit: 100 million transactions/CNY trillion

Year	HVPS		BEPS		Total volume	Total value
	Volume	Value	Volume	Value		
2009	2.48	803.95	2.26	11.46	4.74	815.41
2010	2.91	1 104.37	3.87	16.21	6.78	1 120.58
2011	3.72	1 355.28	5.63	18.36	9.35	1 373.64
2012	4.70	1 772	7.55	18.55	12.25	1 790.55
2013	5.95	2 060.76	10.40	20.32	16.35	2 081.08

1.1.1.1 HVPS

In 2013, the transaction handled by HVPS grew rapidly. According to the statistics of nostro accounts of payment, HVPS processed 595 million transactions with a total value of CNY 2 060.76 trillion, up by 26.6% and 16.3% year on year respectively. On average, the value per transaction decreased by 8.21% to CNY 3.46 million and the daily^① transaction volume was 2.36 million with a value of CNY 8.18 trillion.

**Figure 1 Trend of Changes in Transaction Volume and Value of HVPS during 2006–2013^②**

① In 2013, HVPS ran for 252 working days in total.

② The eastern regions include Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Hainan.



Figure 2 Trend of Changes in Transaction Volume and Value of HVPS in 2013

Transactions of HVPS were mainly concentrated in eastern regions. According to the statistics of nostro and vostro accounts of payment transactions in 2013, transactions processed by HVPS in eastern, middle, western and northeastern regions^① reached 755 million, 193 million, 181 million and 63 million in volume respectively, accounting for 63.36%, 16.22%, 15.16% and 5.26% of the total transaction volume handled by HVPS respectively, with CNY 3 191.57 trillion, CNY 326.1 trillion, CNY 402.98 trillion and CNY 200.88 trillion in value respectively, which accounted for 77.44%, 7.91%, 9.78% and 4.87% of the total value respectively. By the end of this year, transaction volume of HVPS in eastern, middle, western and northeastern regions grew by 24.31%, 32.34%, 31.78% and 22.78% respectively, and transaction value increased by 15.62%, 18.88%, 18.82% and 18.05% respectively. Among these, the growth rate of volume of transactions processed by HVPS in western regions raised 1 percentage point, though that of value dropped 24.99 percentage points. In eastern regions, the growth rate of transaction volume and value dropped respectively by 0.36 and 15.2 percentage points. And in the rest regions, the changes in the growth rate of transactions handled by HVPS differed from each other.

^① The middle regions include Shanxi, Anhui, Jiangxi, Henan, Hubei and Hunan. The western regions include Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia and Xinjiang. The northeastern regions include Liaoning, Heilongjiang and Jilin.

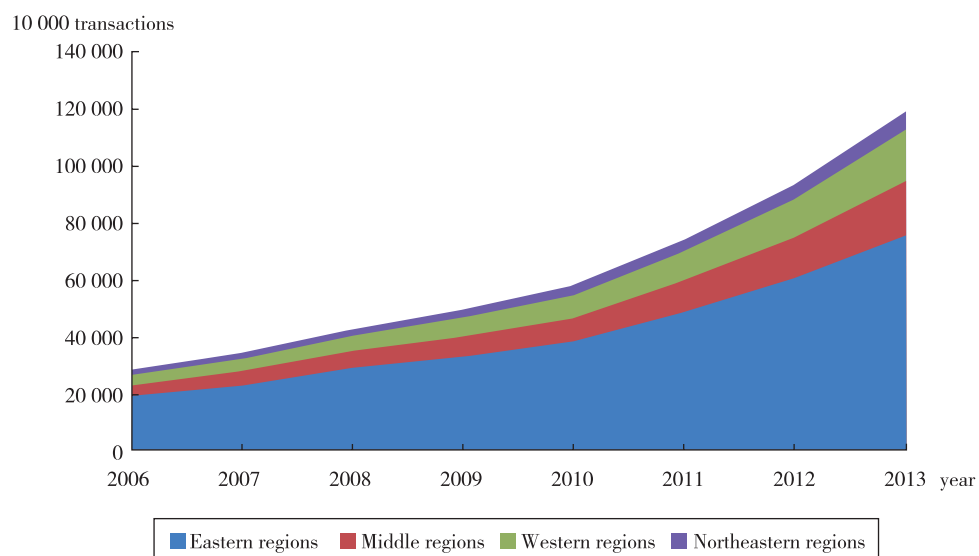


Figure 3 Trend of Changes in Transaction Volume of HVPS during 2006–2013 (by Region)

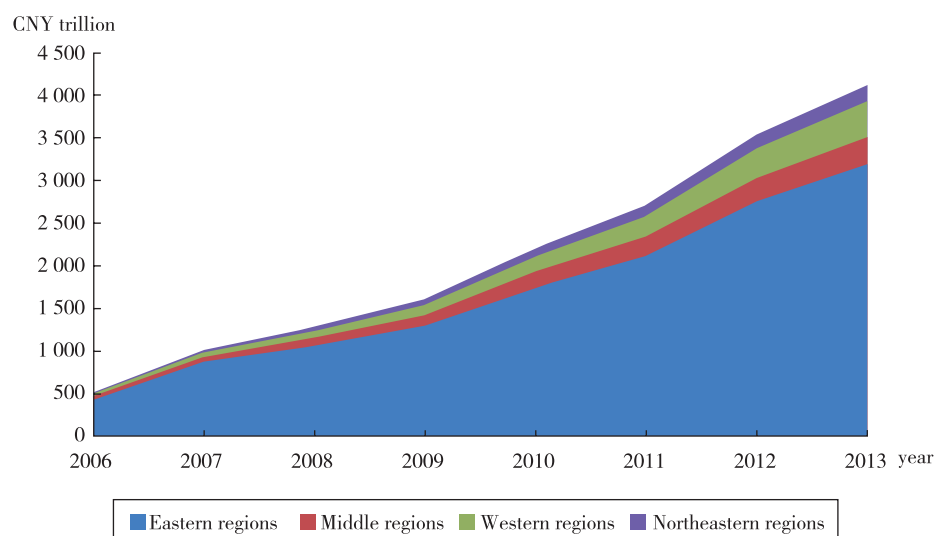


Figure 4 Trend of Changes in Transaction Value of HVPS during 2006–2013 (by Region)

1.1.1.2 BEPS

In 2013, transactions settled by BEPS continued to rise with a slower growth rate. According to the statistics of nostro accounts of payment transactions, BEPS processed 1 040 million transactions with a total value of CNY 20.32 trillion in 2013, up by 37.75% and 9.54% year on year respectively. On average, the value per transaction decreased by 20.56% to CNY 19 500 and the daily^① transaction volume was 2.96 million with a value of CNY 57.71 billion.

① In 2013, BEPS ran for 352 working days in total.

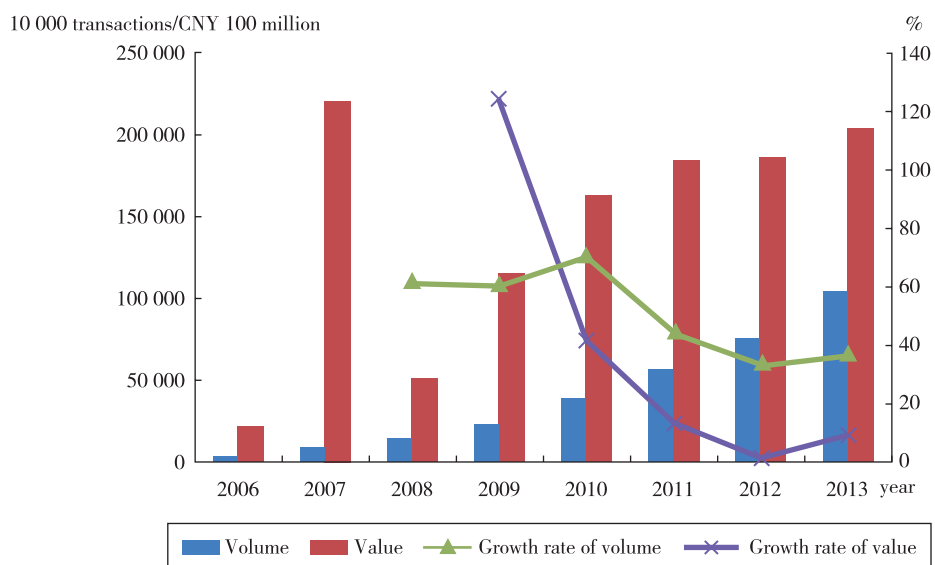
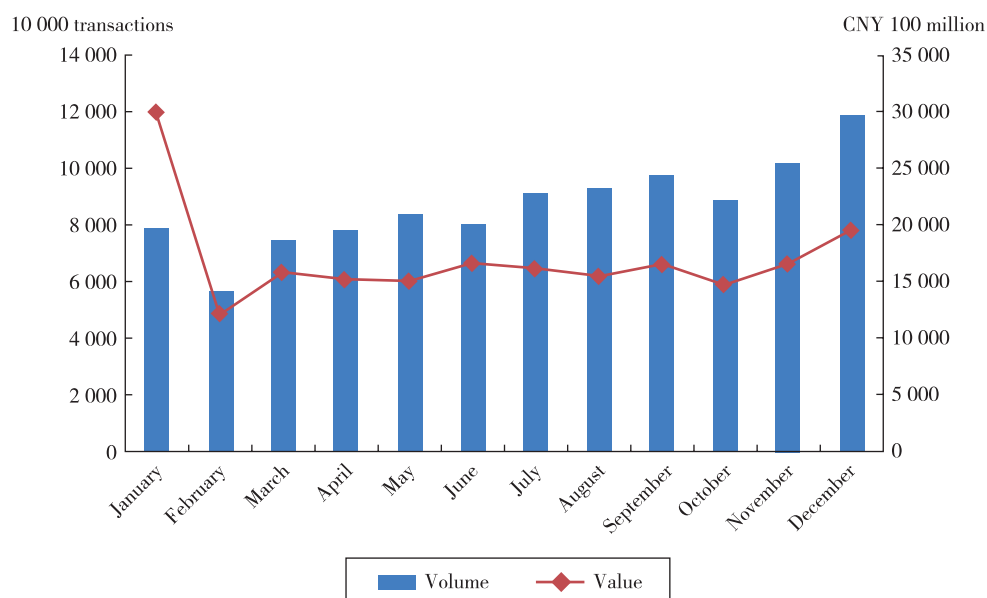
Figure 5 Trend of Changes in Transaction Volume and Value of BEPS during 2006–2013^①

Figure 6 Trend of Changes in Transaction Volume and Value of BEPS in 2013

^① In 2007, the business of BEPS was influenced by the electronic interbank remittance spread business of ABS, so the volume of BEPS businesses in the year was abnormal and incomparable, and the growth rates of transaction volume and value handled by BEPS in 2008 are not marked in the figure.

1.1.2 CIS

In 2013, the growth rate of transactions handled by CIS continued to decline. According to the statistics of nostro accounts of payment transactions, CIS processed 10.99 million transactions with a total value of CNY 539.23 billion in 2013, down by 5.83% and 1.11% year on year respectively. On average, the value per transaction increased by 4.93% to CNY 49 000 and the daily^① transaction volume was 31 500 with a value of CNY 1.55 billion.

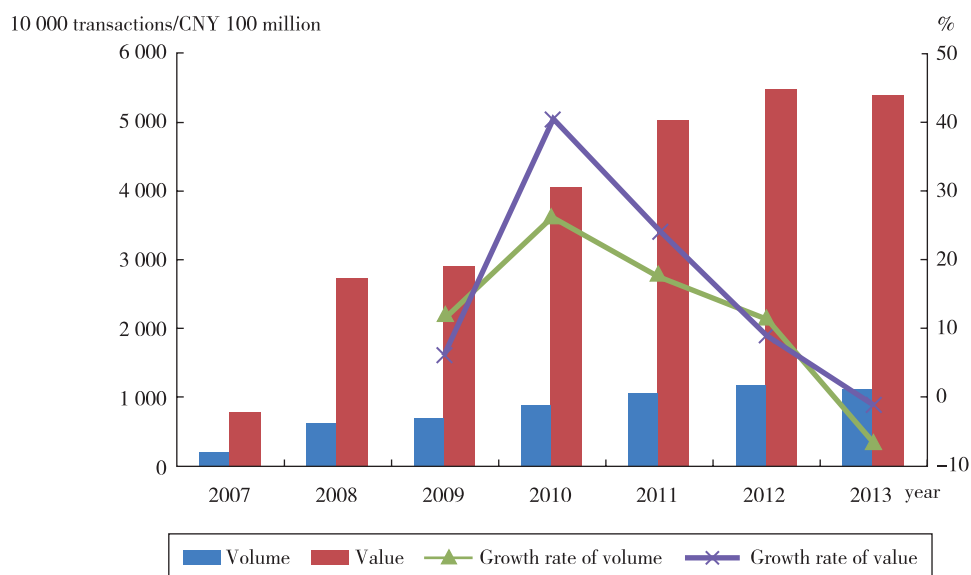


Figure 7 Trend of Changes in Transaction Volume and Value of CIS during 2007–2013

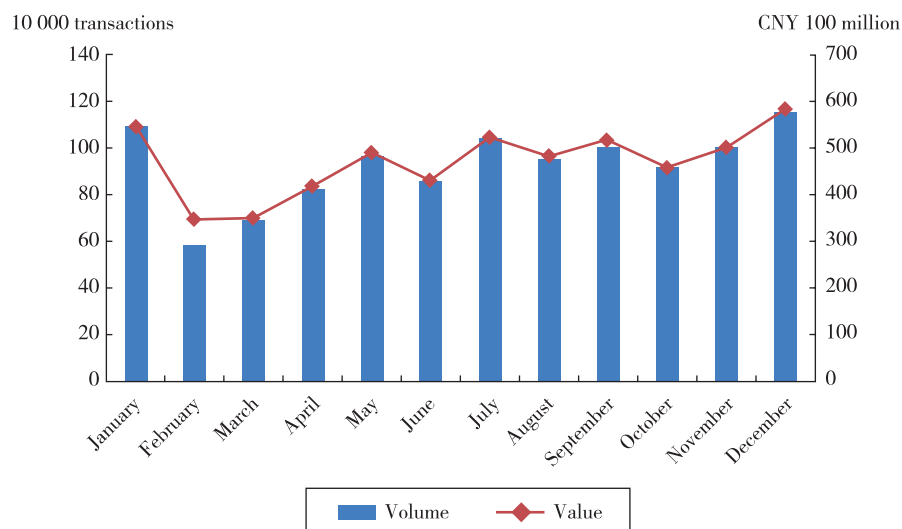


Figure 8 Trend of Changes in Transaction Volume and Value of CIS in 2013

^① In 2013, CIS ran for 349 working days in total.

1.1.3 IBPS

In 2013, transactions of IBPS continued to maintain a rapid growth. By the end of 2013, 132 banking institutions had been connected to the system. IBPS processed 718 million transactions with a total value of CNY 9.47 trillion in 2013, up by 169.92% and 166.01% year on year respectively. On average, the value per transaction decreased by 1.49% to CNY 13 200 and the daily^① transaction volume was 2.06 million with a value of CNY 27.13 billion. And 263 million pieces of payment information were processed, up by 102.55% year on year, and averaged to 754 500 per day.

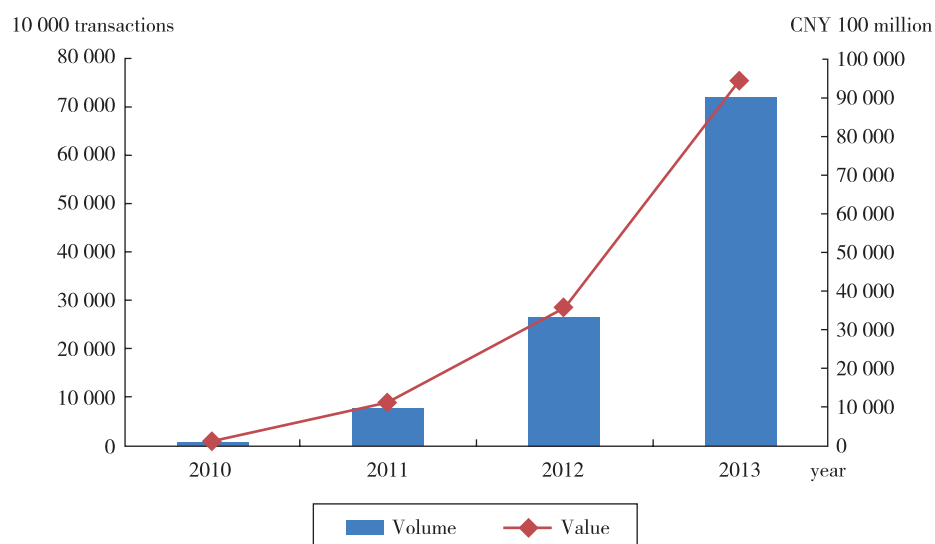


Figure 9 Trend of Changes in Transaction Volume and Value of IBPS during 2010–2013

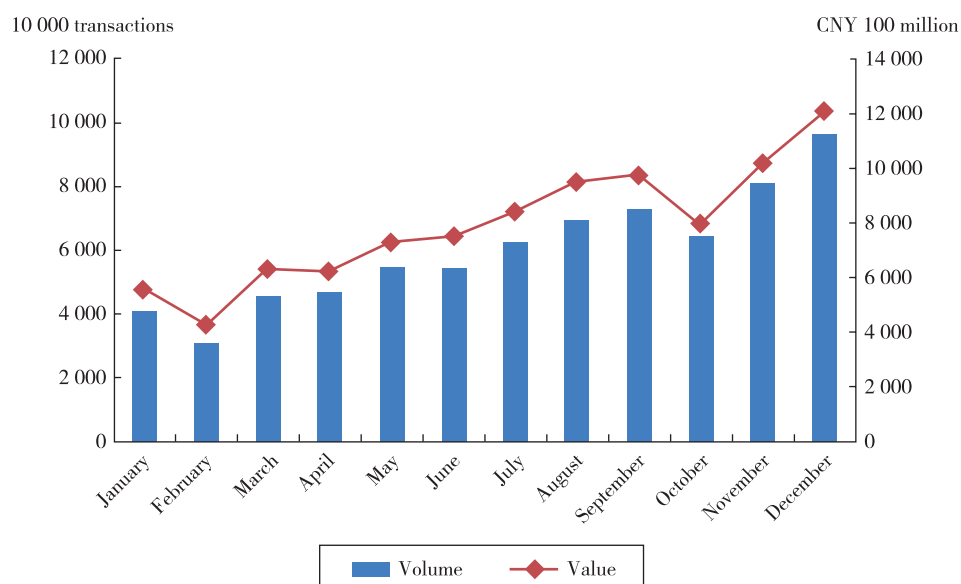


Figure 10 Trend of Changes in Transaction Volume and Value of IBPS in 2013

^① In 2013, IBPS ran for 349 working days in total.

1.1.4 DFCPS

Transactions of DFCPS grew rapidly in 2013. By the end of 2013, DFCPS had owned 39 direct participants, 556 indirect participants and 4 clearing banks. According to the statistics of nostro accounts of payment transactions, DFCPS processed 1.39 million transactions in 2013, with a total value of USD 715.11 billion, up by 25.57% and 34.16% year on year respectively. On average, the value per transaction increased by 6.83% to USD 512 800 and the daily transaction volume was 5 500 with a value of USD 2.84 billion.

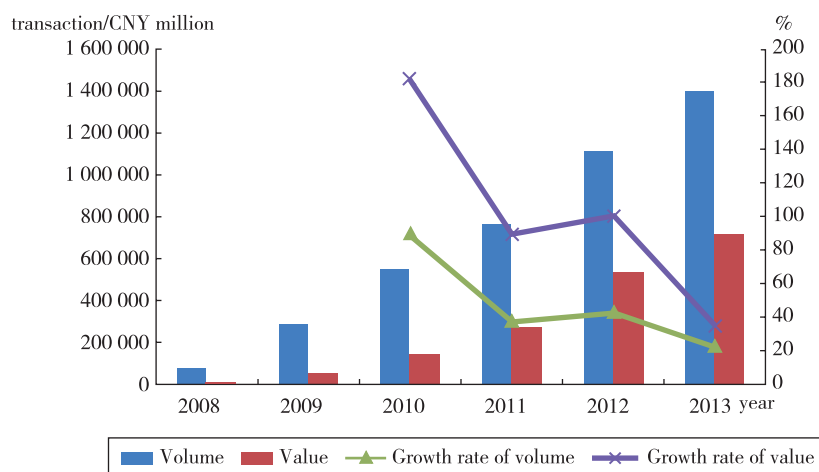


Figure 11 Trend of Changes in Transaction Volume and Value of DFCPS during 2008–2013

1.1.5 ACH

In 2013, transaction volume and number of clearing institutions of ACH continued to decrease. ACH processed 419 million transactions in 2013, with a total value of CNY 68.29 trillion, up by 7.09% and 2.66% year on year respectively. On average, the value per transaction decreased by 4.23% to CNY 162 900.

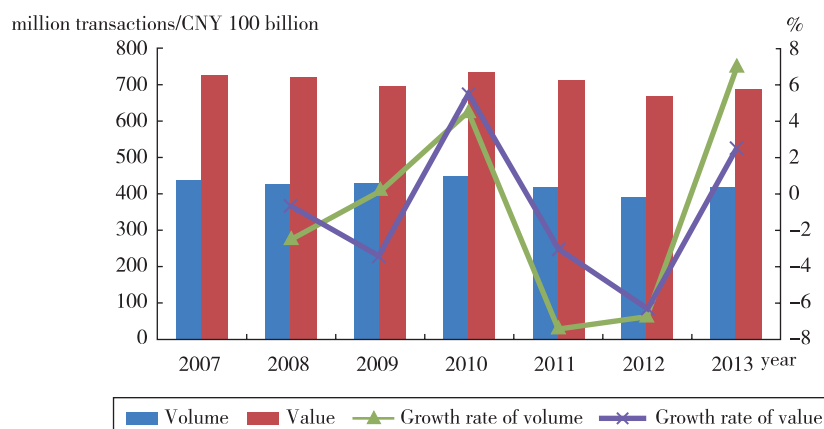


Figure 12 Trend of Changes in Transaction Volume and Value of ACH during 2007–2013

① In 2013, DFCPS ran for 252 working days in total.

1.2 Systems Operated by Other Institutions

1.2.1 Intra-bank Payment Systems of Banking Institutions

In 2013, transactions processed by intra-bank payment systems of banking institutions maintained the growth trend. According to the statistics of nostro and vostro accounts of payment transactions, the systems processed 10.76 billion transactions with a total value of CNY 745.22 trillion in 2013, up by 20.15% and 19.31% year on year respectively. On average, the value per transaction decreased by 0.57% to CNY 69 300.

As the main payment service providers, state-owned commercial banks processed 7.26 billion transactions with a total value of CNY 401.65 trillion in 2013, accounting for 67.42% and 53.9% of the total transactions processed by intra-bank payment systems of banking institutions, which were 0.37 percentage point higher and 3.4 percentage points lower than those of last year respectively. Besides policy banks and city commercial banks, transactions processed by intra-bank payment systems of other banking institutions kept growing, among which, transaction volume of joint-stock commercial banks, PSBC and foreign banks grew rapidly and they ranked the top three in terms of the growth rate of transaction value.

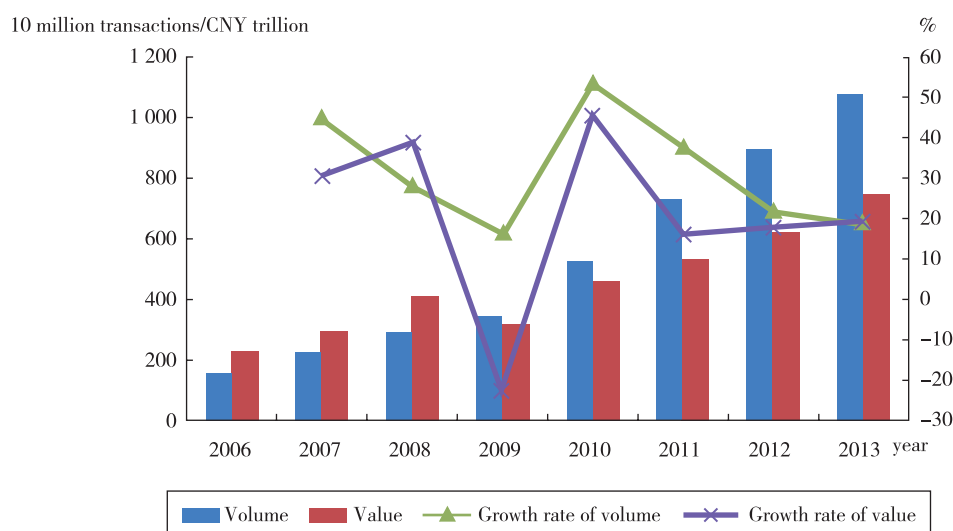


Figure 13 Trend of Changes in Transaction Volume and Value of Intra-bank Payment Systems of Banking Institutions during 2006–2013

Table 3 Transaction Volume of Intra-bank Payment Systems of Banking Institutions in 2013

Unit: 10 000 transactions/%/percentage point

Category	2012		2013		Change in percentage points
	Volume	Percentage	Volume	Percentage	
Policy banks	79.83	0.01	73.24	0.01	0.00
State-owned commercial banks	600 547.56	67.06	725 357.58	67.42	0.35
Joint-stock commercial banks	63 256.52	7.06	107 717.02	10.01	2.95
City commercial banks	50 998.94	5.70	40 198.68	3.74	-1.96
Rural commercial banks	81 403.54	9.09	102 138.33	9.49	0.40
Rural credit cooperatives	36 122.98	4.03	42 439.19	3.94	-0.09
Foreign-invested banks	47.38	0.01	71.07	0.01	0.00
PSBC	63 035.34	7.04	57 920.61	5.38	-1.66

Table 4 Transaction Value of Intra-bank Payment Systems of Banking Institutions in 2013

Unit: CNY 100 million/%/percentage point

Category	2012		2013		Change in percentage points
	Volume	Percentage	Volume	Percentage	
Policy banks	7 466.60	0.12	9 336.54	0.13	0.01
State-owned commercial banks	3 578 440.49	57.30	4 016 467.95	53.90	-3.40
Joint-stock commercial banks	1 214 523.29	19.45	1 826 263.89	24.51	5.06
City commercial banks	838 455.44	13.42	825 391.75	11.08	-2.35
Rural commercial banks	275 698.87	4.41	343 676.78	4.61	0.20
Rural credit cooperatives	180 165.70	2.88	216 496.67	2.91	0.02
Foreign-invested banks	75 040.57	1.20	109 366.82	1.47	0.27
PSBC	75 800.07	1.21	105 227.92	1.41	0.20

Note: The total number of value percentage is not equal to 100% because of rounding.

Table 5 Transaction Volume and Value of Intra-bank Payment Systems of Banking Institutions in 2013

Unit: 10 000 transactions/CNY 100 million/%

Category	2012		2013		Growth rate	
	Volume	Value	Volume	Value	Volume	Value
Policy banks	79.83	7 466.60	73.24	9 336.54	-8.25	25.04
State-owned commercial banks	600 547.56	3 578 440.49	725 357.58	4 016 467.95	20.78	12.24
Joint-stock commercial banks	63 256.52	1 214 523.29	107 717.02	1 826 263.89	70.29	50.37
City commercial banks	50 998.94	838 455.44	40 198.68	825 391.75	-21.18	-1.56
Rural commercial banks	81 403.54	275 698.87	102 138.33	343 676.78	25.47	24.66
Rural credit cooperatives	36 122.98	180 165.70	42 439.19	216 496.67	17.49	20.17
Foreign-invested banks	47.38	75 040.57	71.07	109 366.82	49.99	45.74
PSBC	63 035.34	75 800.07	57 920.61	105 227.92	-8.11	38.82
Total	895 492.09	6 245 591.03	1 075 915.72	7 452 228.32	20.15	19.32

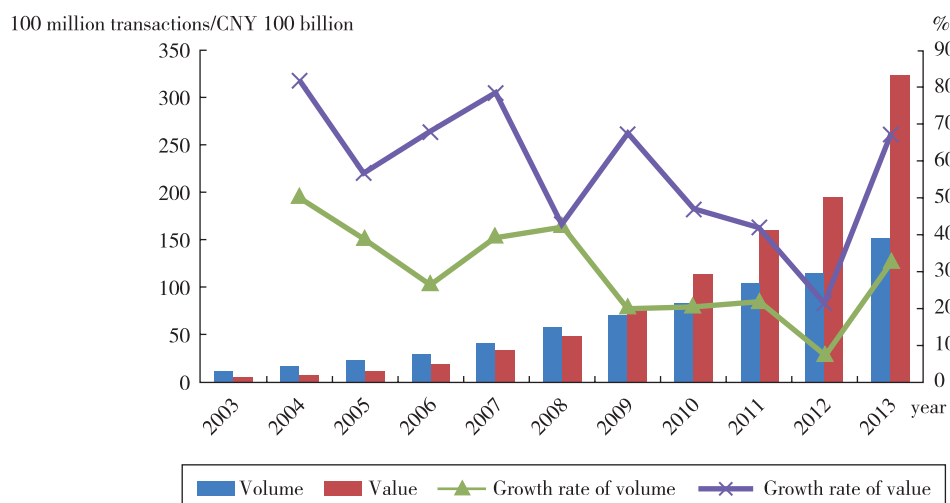
1.2.2 UnionPay Interbank Bankcard Clearing System

In 2013, the volume of transactions processed by UnionPay Interbank Bankcard Clearing System grew steadily. The system successfully^① processed 15.14 billion transactions with a total value of CNY 32.3 trillion, up by 21.2% and 48.4% year on year respectively. Among these transactions, volume and value of successful transactions via ATM^② reached 6.64 billion and CNY 3.6 trillion, up by 12.6% and 28% year on year respectively, and those of successful transactions via POS reached 7.81 billion and CNY 23.8 trillion, up by 24.8% and 44.5% year on year respectively.

UnionPay continuously sped up its course of internationalization in 2013 and 142 countries and regions accepted UnionPay card businesses, with an increase of 7 over last year. Among these countries and regions, 102 accepted UnionPay cards in merchants, 121 in ATM terminals and 28 issued UnionPay standard cards in the year. By the end of 2013, the accumulated number of UnionPay standard cards issued abroad had approached 25.85 million. There were 314 oversea institutions joined the union and engaged in UnionPay card businesses, among which, 116 issued the cards, 254 accepted the cards and 49 accepted the cards online.

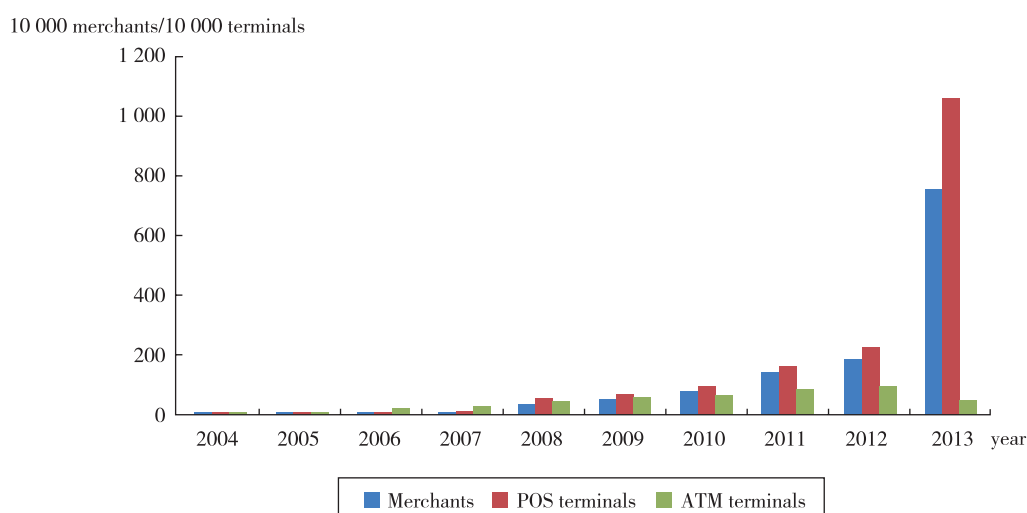
^① Those were the successful interbank transactions of ATM, POS and other channels based on bankcards through internet, telephone, including depositing, withdrawing, consuming, transferring and inquiring.

^② Those included depositing, withdrawing, transferring and inquiring.



Source: China UnionPay Co., Ltd..

Figure 14 Trend of Changes in Volume and Value of Successful Interbank Bankcard Transactions during 2003–2013



Source: China UnionPay Co., Ltd..

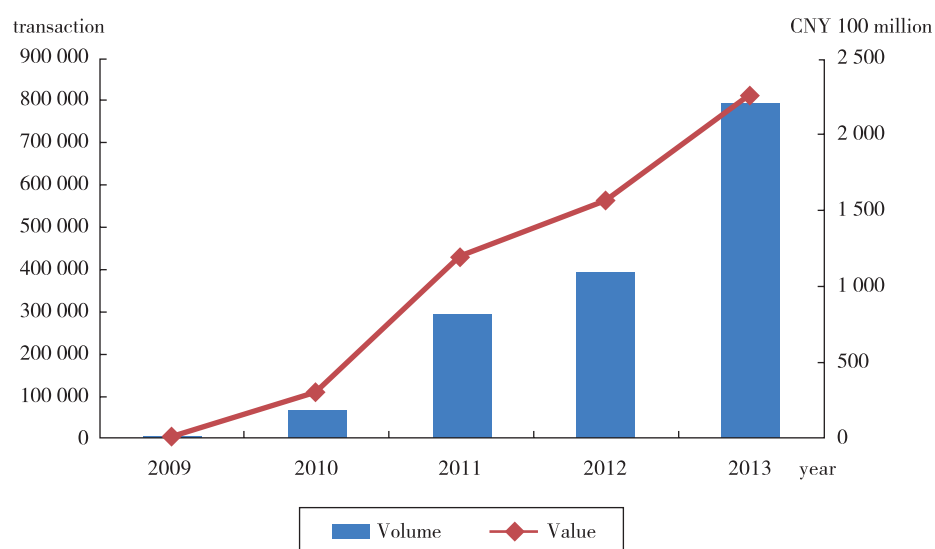
Figure 15 Expansion of UnionPay Overseas Acceptance Market during 2004–2013

1.2.3 Draft Processing System and Payment and Clearing System for City Commercial Banks

In 2013, transaction volume of Payment and Clearing System of CCCCB continued to rise steadily. There were 75 banks connected to the system, with an increase of 8 over the year. The system processed 793 000 transactions with a total value of CNY 224.71 billion, up by 102.45% and 43.37% year on year respectively. Of those, the volume and value of remittance were 227 400 and CNY 110.49 billion, up by 40.72% and 71.31% year on year respectively. The volume of deposits and

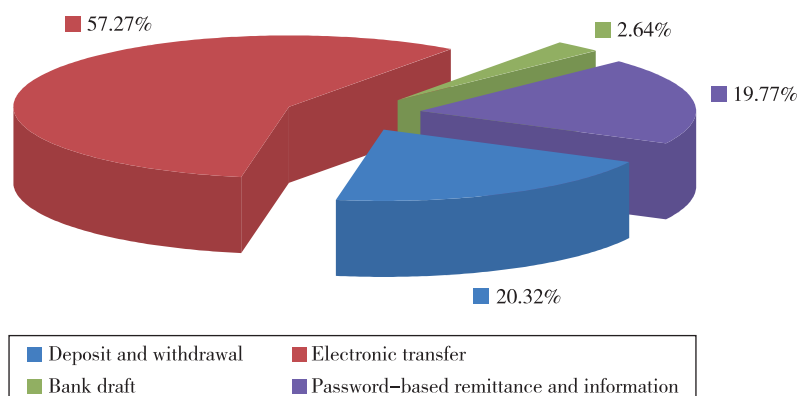
withdrawals was 161 000 with a value of CNY 83.95 billion, down by 30% and 8.98% year on year respectively.

In 2013, transaction volume of Draft Processing System for City Commercial Banks kept decreasing. 27 000 bank drafts were issued with a total value of CNY 34.98 billion, down by 25.21% and 20.28% year on year respectively. 15 800 bank drafts were honored with a total value of CNY 20.98 billion, down by 33.05% and 29.59% year on year respectively. Of those, 4 290 drafts were honored by ICBC with a value of CNY 4.81 billion, decreased by 35.82% and 35.54% respectively from last year.



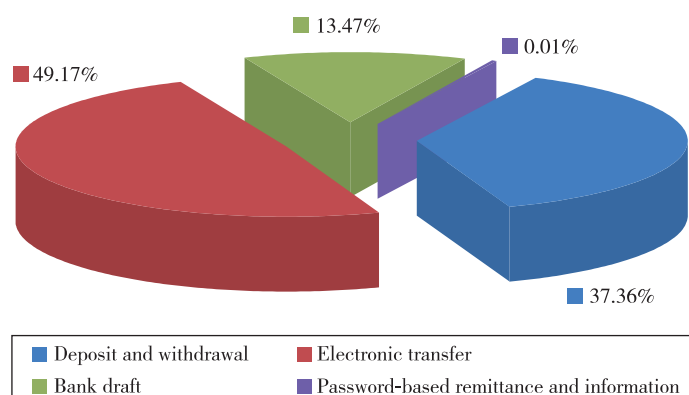
Source: CCCCB.

Figure 16 Trend of Changes in Volume and Value of Payment and Clearing Transactions of CCCCB during 2009–2013



Source: CCCCB.

Figure 17 Breakdown of Transaction Volume of Payment and Clearing of CCCCB in 2013



Note: The total number of value percentage is not equal to 100% because of rounding.

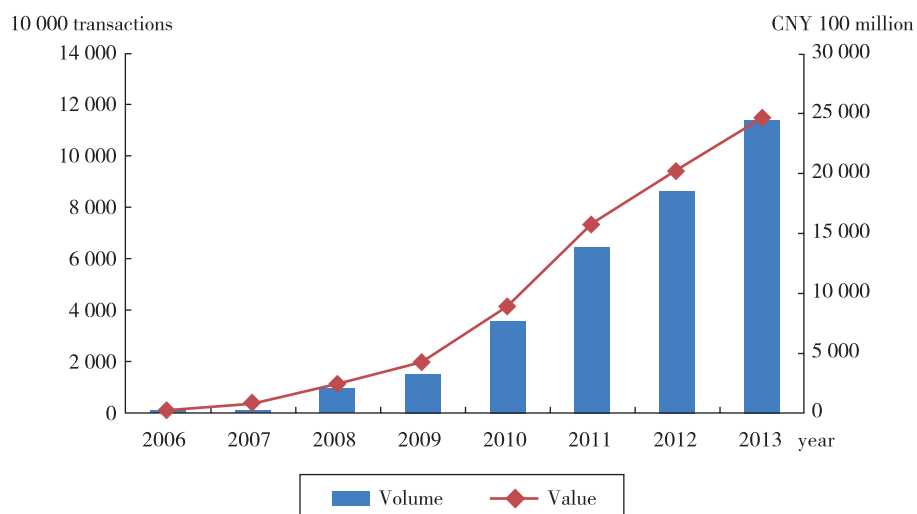
Source: CCCC.

Figure 18 Breakdown of Transaction Value of Payment and Clearing of CCCC in 2013

1.2.4 Payment and Clearing System for Rural Credit Banks of RCBFCC

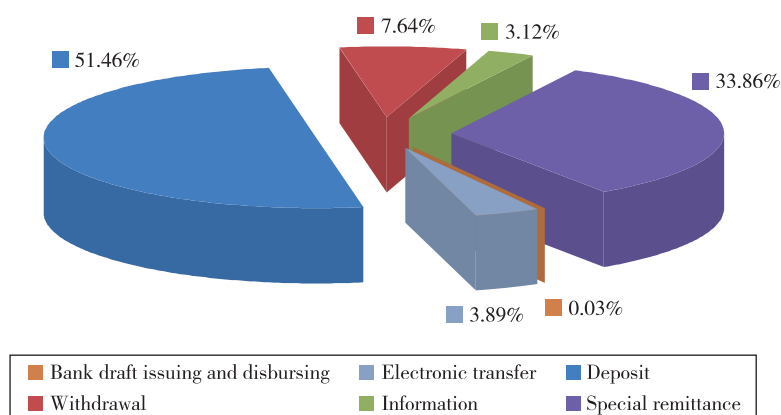
In 2013, the transactions processed by rural cooperative financial institutions via Payment and Clearing System for Rural Credit Banks increased further. 121.53 million payment and settlement transactions were processed with a total value of 2.47 trillion, up by 40.23% and 22.55% year on year respectively. Among those, the system processed 71.82 million transactions of deposits and withdrawals of individual accounts with a value of CNY 1.35 trillion^①, up by 12.66% and 19.05% year on year respectively, issued 25 200 bank drafts valuing CNY 7.41 billion, down by 16.51% and 27.13% year on year respectively, and disbursed 11 100 bank drafts valuing CNY 4.71 billion, down by 32.38% and 34.64% year on year respectively, processed 4.73 million transactions of electronic transfers with a value of CNY 323.04 billion, up by 23.94% and 23.29% year on year respectively. Annual stable operation ratio of system reached 99.997% and success ratio of transactions reached 99.14%.

^① Of that, the volume of deposits (included local to nonlocal) was 62.53 million with the value of CNY 1.05 trillion, the volume of withdrawals (included nonlocal to local) was 9.29 million with the value of CNY 296.47 billion.



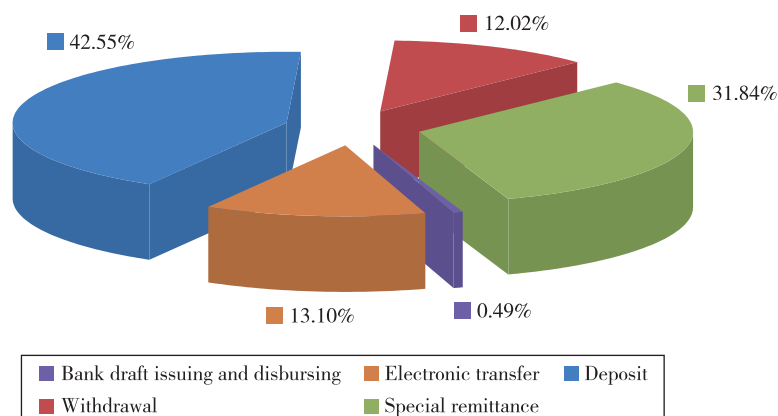
Source: RCBFCC.

Figure 19 Trend of Changes in Transaction Volume and Value of Payment and Clearing System for Rural Credit Banks during 2006–2013



Source: RCBFCC.

Figure 20 Breakdown of Transaction Volume of Payment and Clearing System for Rural Credit Banks in 2013



Source: RCBFCC.

Figure 21 Breakdown of Transaction Value of Payment and Clearing System for Rural Credit Banks in 2013

2. Securities Settlement Systems

2.1 CBGS

In 2013, CBGS operated smoothly. The volume of bond registration, depository and settlement maintained rapid growth. The liquidity of interbank bond market was improved. Bond delivery and fund settlement became more efficient and had lower risk. These laid solid foundation for the innovation of financial instruments and services in the bond market.

The operation system of CBGS went steadily. In 2013, the number of bonds issued in the interbank bond market increased in line with the global economic trend and the requirement of domestic macroeconomic policy. The total volume of bond depository in CCDC grew steadily. The volume of bond settlement increased slightly, while the scale of DVP settlement continued to expand.

The growth of the overall scale of bond issuance slowed down. In 2013, the overall issuance (including central bank bill) in the bond market amounted to CNY 8.7 trillion, up by 1.52% than that in 2012. Among them, the number of new bond issuance via CCDC was 1 150 with a gross value of CNY 5.65 trillion, which accounted for 64.88% of the total bond market issuance. The number of new bond issuance via SHCH was 2 000 with a gross value of CNY 2.78, which accounted for 32% of the total bond market issuance. The rest were corporate bonds and small-and-medium-sized enterprise private placement bonds issued by the exchanges. There were 331 of them and the overall value amounted to CNY 271.73 billion, which accounted for 3.12% of the total bond market issuance.

Table 6 Issuance of Bond Market in 2013

	Insuance (billion)	Volume
The total	8 701.63	3 481
CCDC	5 645.39	1 150
SHCH	2 784.50	2 000
SD&C	271.73	331

Sources: China Bond Website, SHCH Website and Wind.

Regarding to the types of the bonds newly issued, treasury bond issuance increased by 11.15% to CNY 1.34 trillion, corporate bond issuance decreased by 26.88% to CNY 475.23 billion, policy bank bond issuance reduced by 7.16% to CNY 2 trillion, commercial bank bond issuance dropped

by 71.6% to CNY 111.7 billion. As the primary bond types, policy bank bonds and treasury bonds together accounted for 59.05% of the overall market issuance.

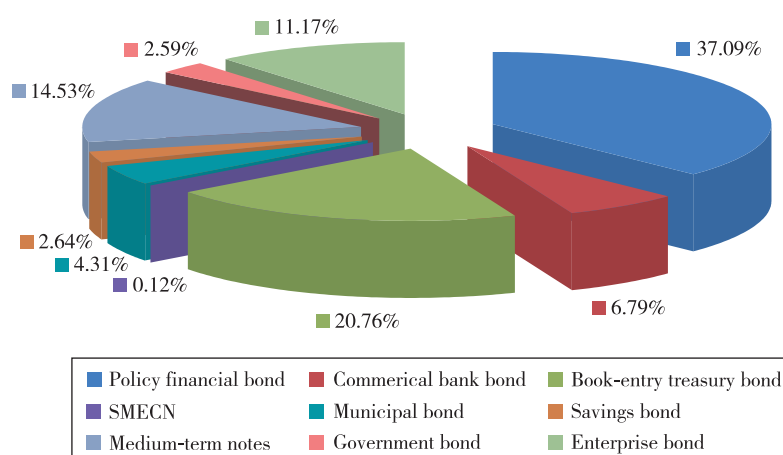


Figure 22 Breakdown of Bond Issuance Amount by Bond Types in 2013

Regarding to the term structures of the bonds newly issued, middle-to-long-term bonds with terms of 3 to 10 years took a percentage of 56.3%, while the short-term bonds with terms shorter than 3 years and the long-term bonds with terms longer than 10 years took percentages of 39.4% and 4.3% respectively.

The overall amount of bond depository continued to grow steadily. By the end of 2013, a total amount of bond depository had gone up by CNY 3.52 trillion to CNY 29.48 trillion with a year-on-year increase of 13.56%. CNY 25.91 trillion was deposited in CCDC, accounting for 87.89% of the total bond depository. CNY 2.69 trillion was deposited in SHCH, accounting for 9.11% of the total bond depository. CNY 0.88 trillion was deposited in the exchanges, namely corporate bonds and small-and-medium-sized enterprise private placement bonds, accounting for 3% of the total bond depository.

Table 7 The Balance Outstanding in the Bond Market in 2013

	Balance outstanding (billion)	Volume
The total	29 482.15	7 075
CCDC	25 911.33	4 234
SHCH	2 687.20	2 066
SD&C	883.62	775

Sources: China Bond Website, SHCH Website and Wind.

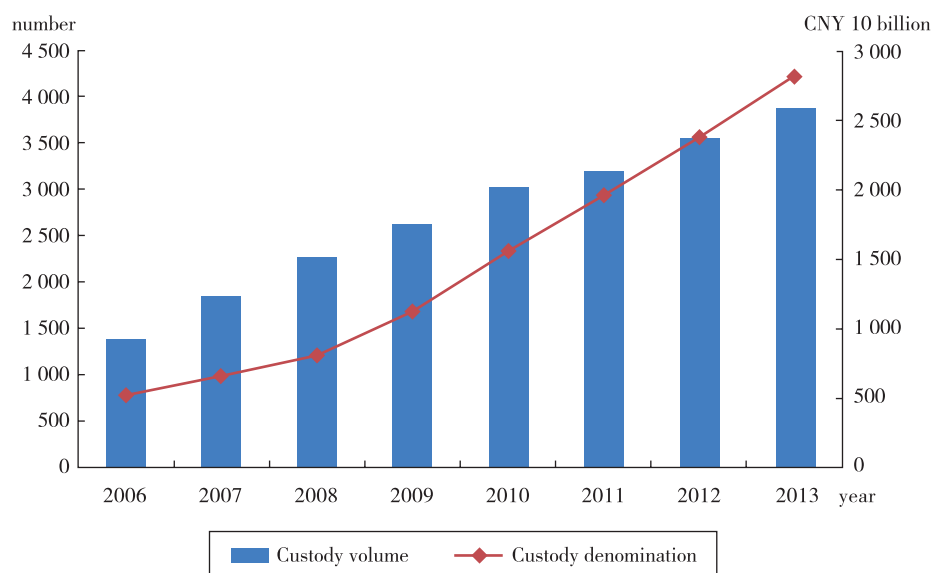


Figure 23 Denomination and Volume of Bonds in Depository at the End of 2013

The growth of bond settlement decelerated considerably. In 2013, cash and repurchase transactions of the bond market settled for CNY 270.82 trillion with an year-on-year increase of 1.15%. Thereinto, the settlement of cash transactions amounted to CNY 43.23 trillion in value, down by 45.4%, and that of repurchase transactions achieved CNY 227.59 trillion in value, up by 20.69%.

Total transactions settled via CCDC was CNY 195.9 trillion in value with a year-on-year decrease by 10.33%. Thereinto, cash transactions amounted to CNY 36.97 trillion, down by 47.81% and repurchase transactions reached CNY 158.93 trillion, up by 7.68% year on year. Total transactions settled via SHCH was CNY 10.84 trillion, down by 8.64% on a year-on-year basis. Thereinto, cash transactions settled amounted to CNY 5.24 trillion, down by 32.28% compared with that of last year. Repurchase transactions reached CNY 5.59 trillion, up by 35.73% compared with that of last year. Bond transactions settled via the exchanges achieved CNY 64.08 trillion with a year-on-year increase of 71.15%. Thereinto, cash transactions settled amounted to CNY 1.01 trillion and repurchase transactions CNY 63.07 trillion, up by 71.39% and 71.14% respectively compared those of with last year.

Regarding to the bond types of the cash transactions, the credit bonds settlement decreased by 37.03% from last year, constituting 49.9% of the total cash settlement amount. The policy bank bonds settlement decreased by 42.57%, making up 30.98% of the total cash settlement amount. The central bank notes settlement dropped by 87.24%, accounting for 2.51% of the total cash settlement amount. And the treasury bonds together with local government bonds settlement fell by 48.38%, standing for 13.74% of the total cash settlement amount. The gross over-the-counter commercial bank bonds settlement summed up to CNY1.87 billion, with a year-on-year increase of 24.88%.

Table 8 The Settlement of Cash and Repurchase Transactions of the Bond Market in 2013

	Settlement (trillion)	Volume
The total	270.82	1 071 957
CCDC	195.90	947 451
Cash transactions	36.98	457 536
Repurchase transactions	158.93	489 915
SHCH	10.84	124 506
Cash transactions	5.24	85 098
Repurchase transactions	5.59	39 408
SD&C	64.08	
Cash transactions	1.01	
Repurchase transactions	63.07	

Sources: China Bond Website, SHCH Website and Wind.

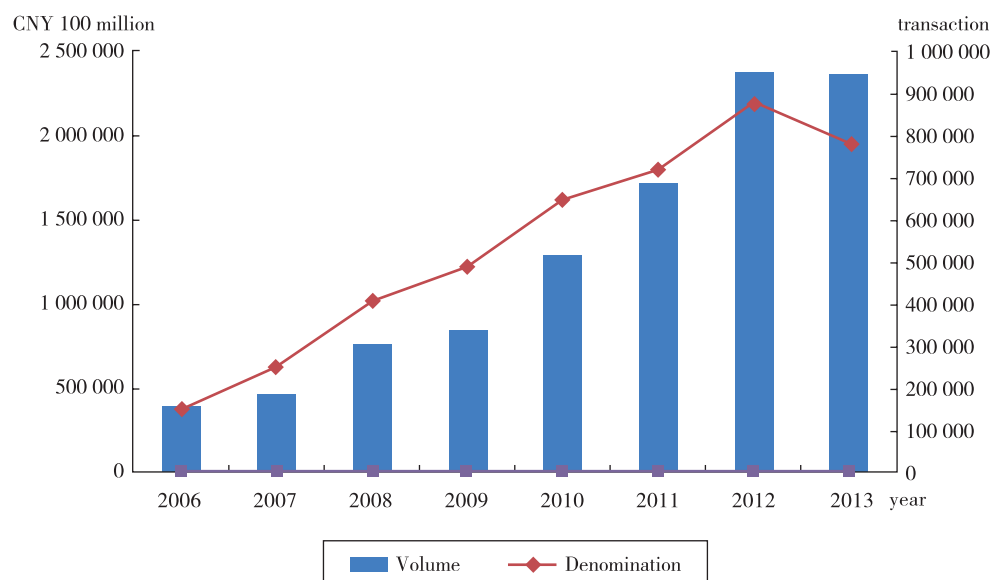


Figure 24 Trend of Settlement Volume and Denomination of Bond Transactions during 2006–2013

The DVP settlement grew stably. By the end of 2013, the total number of interbank clearing participants adopting DVP settlement had hit 4,963, up by 2 072(71.67%) compared with that of last year. The total DVP settlement volume and value reached 1.11 million and CNY 309.91 trillion, with a year-on-year increase of 19.84% and 3.07% respectively. Of the total DVP settlement, the non-banking DVP settlement volume and value were 753 600 and CNY 125.32 trillion, up by 38.63%

and 19.01% year on year respectively. From the statistics of the entire year, the number of non-bank DVP settlement accounted for 68.01% of the total settlement volume and the value accounted for 40.44% of the market value.

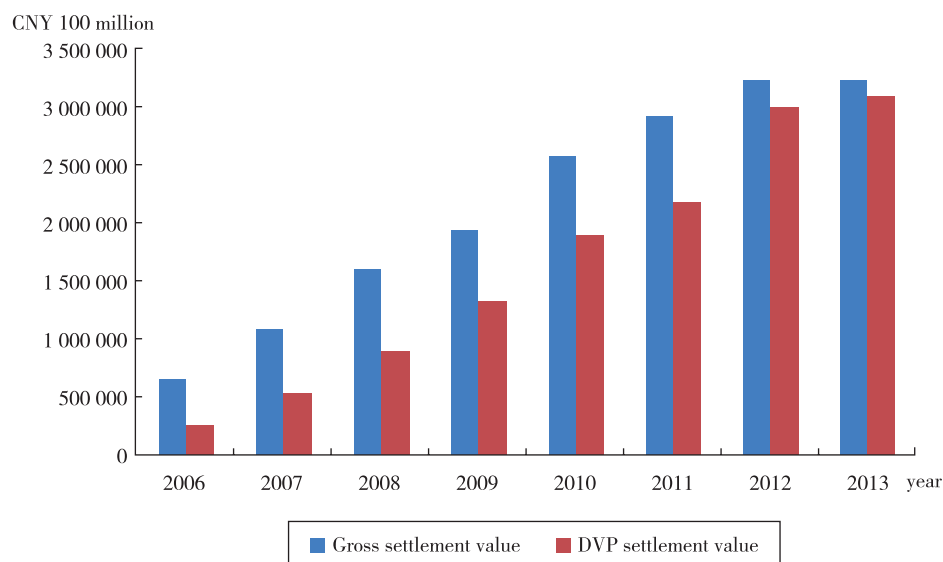


Figure 25 Trend of Gross Settlement Value and DVP Settlement Value during 2006–2013

Bond redemption and cash payment ran smoothly. In 2013, total coupon payment of bonds amounted to CNY 4.43 trillion with an increase of 7.52% compared with that of last year. The total number of treasury bonds, financial bonds, corporate bonds, mid-term bonds, central bank notes, commercial bank bonds and asset backed securities which made coupon payment was 3 690.

2.2 Securities Registration and Settlement System of China

In 2013, the Securities Registration and Settlement System of SD&C operated smoothly. The number of security accounts grew slowly, while that of securities registered and deposited at SD&C increased obviously.

2.2.1 The number of newly-opened accounts decreased

At the end of 2013, SD&C had 6 437 SSE listed A-share account-opening agencies, up by 624 over the last year, and 5 775 SZSE listed A-share account-opening agencies, up by 497 over the last year.

About 4.93 million new accounts were opened in 2013, down by around 633 000, namely 11.38%, from last year. Of these, 4.91 million were A-share accounts, which decreased by 636 600, namely 11.47% from last year, and 16 300 were B-share accounts, which increased by 3 500, namely 27.34% from last year.

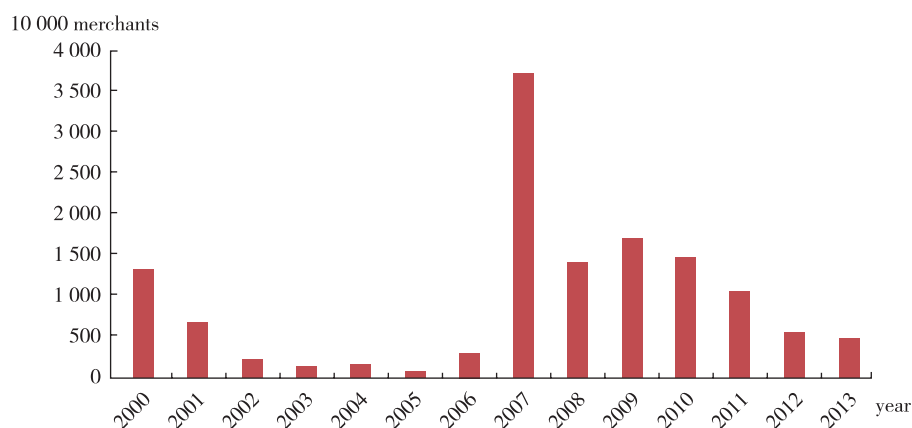


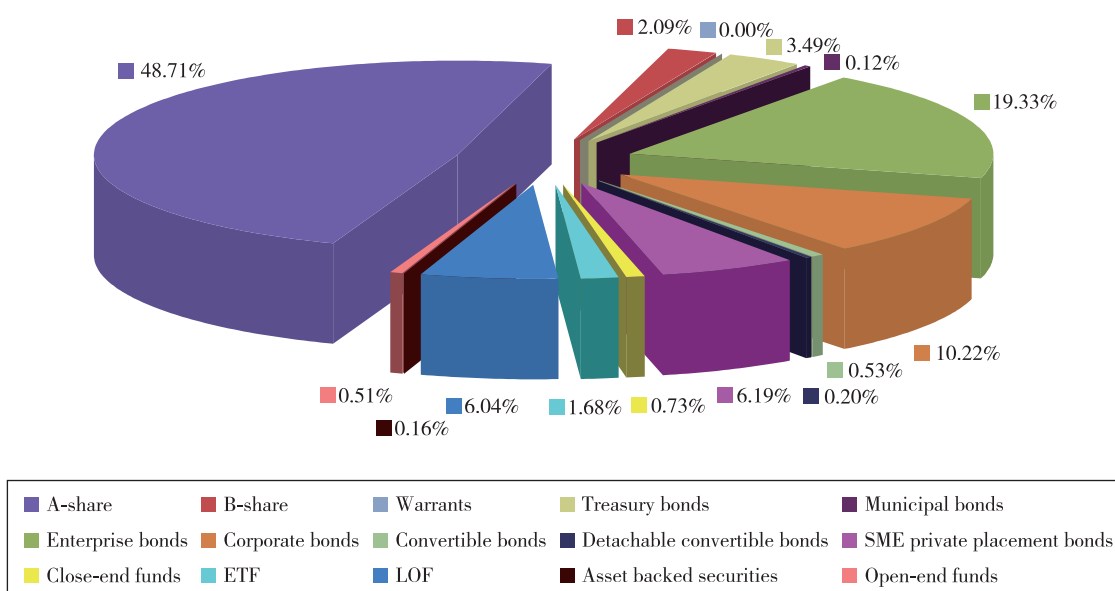
Figure 26 The Number of Newly-Opened A-Share Accounts during 2000–2013

By the end of 2013, the number of share accounts had been about 175.18 million, of which A-share accounts increased by 4.52 million to 172.63 million, with a year-on-year increase of 2.69%, and B-share accounts increased by 12 100 to 2.54 million, with a year-on-year increase of 0.48%. It was verified and reported by securities companies that there were 42.7 million dormant accounts, the total valid share accounts amounted to 132.47 million.

2.2.2 The quantity of securities registered and deposited at SD&C increased significantly

By the end of 2013, there had been 5 069 securities registered and deposited at SD&C, of which A-shares decreased by 3 to 2 469, B-shares decreased by 1 to 106, treasury bonds increased by 55 to 177, local government bonds increased by 3 to 6, corporate bonds increased by 622 to 980, enterprise bonds decreased by 43 to 518, convertible bonds increased by 4 to 27, detachable convertible bonds decreased by 6 to 10, small-and-medium-sized enterprise private placement bonds increased by 227 to 314, close-end funds had decreased by 15 to 37, ETFs increased by 35 to 85, LOFs increased by 78 to 306, asset backed securities increased by 11 to 26, and open-end money market funds reached 8.

At the end of 2013, the nominal value of the securities registered and deposited at SD&C amounted to CNY 5.61 trillion, of which the nominal value of negotiable A-shares was CNY 3 trillion, and that of negotiable B-shares amounted to CNY 28.26 billion, restricted negotiable shares CNY 341.85 billion, non-negotiable shares CNY 839 million, treasury bonds CNY 239.09 billion, local government bonds CNY 1.67 billion, enterprise bonds CNY 684.06 billion, corporate bonds CNY 795.62 billion, convertible bonds CNY 160.6 billion, detachable convertible bonds CNY 59.84 billion, small-and-medium-sized enterprise private placement bonds CNY 39.23 billion, close-end funds CNY 58 billion, ETFs CNY 107.58 billion, LOFs CNY 67.92 billion, open-end money market funds CNY 22.73 billion, asset backed securities CNY 7.25 billion.



Note: The total number of the percentage is not equal to 100% because of rounding.

Figure 27 Breakdown of Securities Registered and Deposited at SD&C in 2013

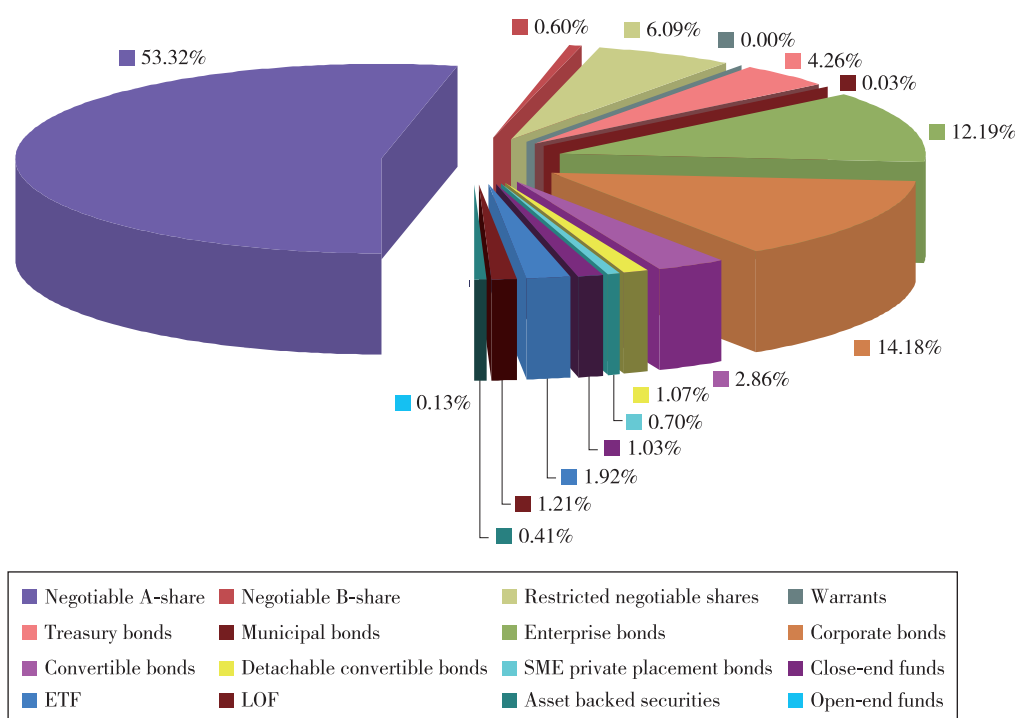


Figure 28 Breakdown of Nominal Values of Securities Registered and Deposited at SD&C in 2013

At the end of 2013, the total market value of securities registered and deposited at SD&C amounted to CNY 26.2 trillion, of which the market value of negotiable A-shares was CNY 20.46 trillion and negotiable B-shares was CNY 166.54 billion, restricted negotiable shares CNY 3.31 trillion, non-negotiable shares CNY 14.25 billion, treasury bonds CNY 233.24 billion, local government bonds

CNY 1.67 billion, enterprise bonds CNY 680.57 billion, corporate bonds CNY 778.77 billion, convertible bonds CNY 161 billion, detachable convertible bonds CNY 58.1 billion, small-and-medium-sized enterprise private placement bonds CNY 37.11 billion, close-end funds CNY 54.31 billion, ETFs CNY 157.58 billion, LOFs CNY 56.08 billion, open-end money market funds CNY 19.4 billion, asset backed securities CNY 6.45 billion.

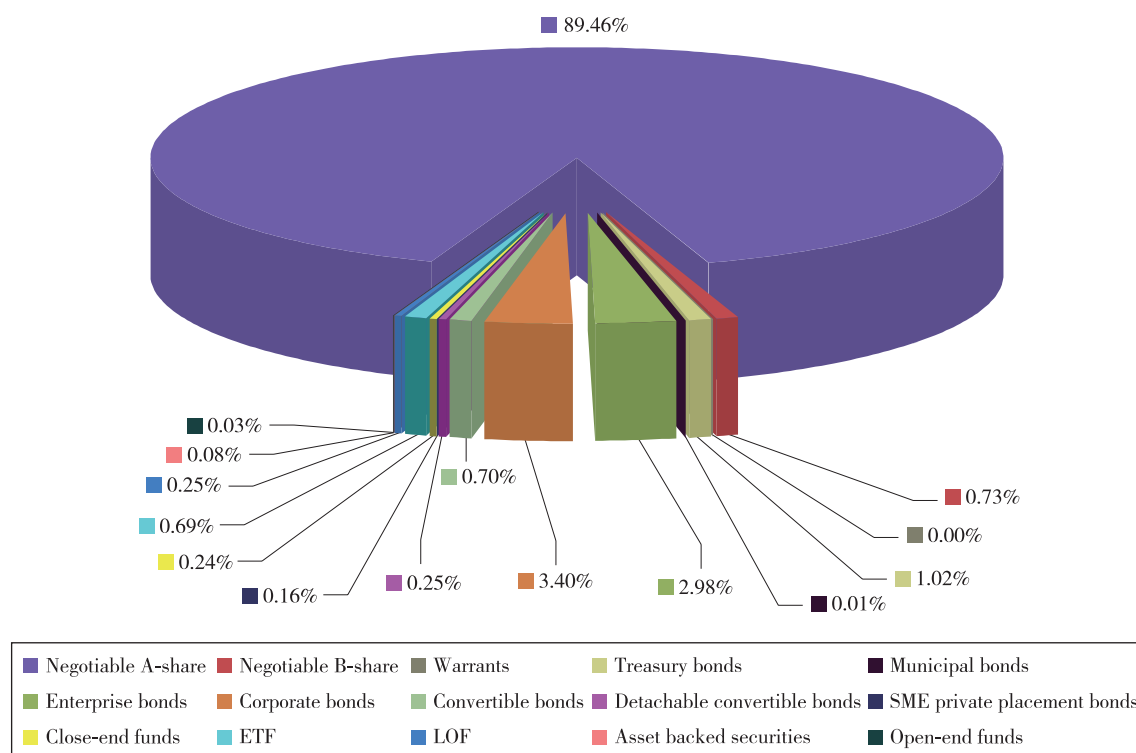


Figure 29 Breakdown of the Market Value of Securities Registered and Deposited at SD&C in 2013

2.2.3 Gross settlement value and net settlement value increased

In 2013, the gross settlement value of SD&C increased to CNY 355.3 trillion by 49.21% on a year-on-year basis, namely CNY 117.18 trillion. The net settlement value increased to CNY 13.62 trillion by 38.13% on a year-on-year basis, namely CNY 3.76 trillion.

2.2.4 The open-end fund business developed steadily

By the end of 2013, there had been 141 asset managers participating in the open-end fund TA system of SD&C, including 55 fund management companies, 85 securities firms and 1 commercial bank. 1 850 financial products were issued, including 385 open-end funds, 23 innovative close-end funds, 1 428 collective asset management schemes sponsored by securities firms and 14 bank financial products. The product line covered equity, bond, hybrid fund, MMF, principal guaranteed fund, QDII, FOF, LOF, Fund Expert of Shanghai Stock Exchange, OTC ETF, etc.. Moreover, the

TA system fully supported operations of collective asset management schemes, such as subscription and redemption, dividend distribution, performance-based compensation, limited return guarantee, rollover and cross-TA transfer.

2.3 The System of SHCH

By the end of 2013, SHCH had provided issuance and depository service to twelve innovative products including credit risk mitigation warrant, super short-term commercial paper, non-financial corporation asset backed notes etc..

The scale of issuance and depository service continued to expand. In 2013, the gross nominal value of all debt instruments issued and deposited at SHCH was CNY 2.78 trillion with a year-on-year increase of 47.06%. A mid-term note denominated 200 million dollar was issued. A debt instrument with cumulative par value of CNY 1.8 trillion was paid, which surged by 197.7% from last year. Depository balance of CNY 2.69 trillion was reached, with a year-on-year increase of 57.62%. SHCH extended the issuance and depository service to MTN, SMECN, NCD etc.. Of the gross debt instrument issuance, CNY 2.44 trillion was debentures, up by 34.69% from last year and CNY 349.18 billion was financial bonds, up by 309.06%.

The scope of market service enlarged gradually. By 2013, 4 085 investor accounts had been opened in SHCH, of which 2 were policy banks, 259 were commercial banks, 103 were securities firms, 75 were insurance companies, 132 were credit cooperatives, 92 were non-bank financial institutions, 18 were non-financial corporations, 60 were foreign institutions approved by PBC and 3 344 were non-corporate entities. The non-corporate entities that had opened accounts with SHCH included 1 048 securities investment funds, 912 pension schemes, 76 insurance products, 484 trust products, 546 asset management schemes by securities firms, 43 social security funds, 211 asset management portfolios for specific customers of fund management companies and 24 other non-corporate entities.

3. Central Counterparty

In 2013, the central clearing business of SHCH continued to expand and its systems operated smoothly.

The central clearing of bond spot trading went well. In 2013, spot trading cleared amounted to CNY 5.24 trillion and repurchase trading cleared CNY 5.59 trillion. Thereinto, central clearing of bond spot trading reached 4 053. Its par value cleared was CNY 628.32 billion and the settlement

amounted to CNY 71.83 billion. Net clearing members of spot trading increased from 53 in 2012 to 58 in 2013.

The central clearing of FX transactions operated smoothly. SHCH cooperated with CFETS to guarantee the stable migration of clearing services for FX auction and inquiry trading. SHCH has been providing central clearing service for FX spot auction trading since 22nd August 2011 and net clearing services for RMB/FX spot inquiry trading, forward trading and swap trading since 12th April 2013. At the end of 2013, the number of clearing members engaged in FX auction trading was 249 and that engaged in FX inquiry trading 26. In 2013, the volume of FX auction trading was 12 000 and that of FX inquiry trading was 125 000. The total value amounted to USD 2.3 trillion.

Central Clearing of RMB Forward Freight Agreement was officially launched. On 16th April 2013, central clearing for RMB FFA went live and the clearing products included CTC, PTC and STC. By the end of 2013, 3 clearing members, 6 RMB FFA agents and 132 freight companies had engaged in the business.

Topic 1

Development and Supervision of Chinese Payment Institutions

In June 2010, PBC issued *Administrative Measures on Payment Services Provided by Non-financial Institutions* (Ordinance of PBC [2010] No.2) to oversight the payment services provided by non-financial institutions (NFIs). In May 2011, PBC began to grant the first license to NFIs. By the end of 2013, 250 NFIs had got the license. In general, those institutions have undergone rapid development, exerted obvious influence, and formed a scaled industry.

1. The PBC took multiple measures to strengthen the supervision over payment institutions

Since the beginning of 21st Century, the revolution of information technology had propelled payment services to develop in a market-oriented and diversified way in China. More and more NFIs had been providing payment services via internet and various mobile terminals.

The participation of NFIs in the payment service market had diversified retail payment services, facilitated daily payment of the public and fund circulation in e-commerce. NFIs had played an active role in supporting such macro-economic policies as “improving people’s wellbeing, promoting consumption and increasing domestic demand”. However, problems such as ill-formed operation of NFIs and disorderly competition in the market came to the surface. Also, risk events like infringement of consumers’ rights and leakage of clients’ private information occurred occasionally.

Since 2005, PBC had been carrying out researches in payment services provided by NFIs. In June 2010, PBC released *Administrative Measures on Payment Services Provided by Non-financial Institutions* (referred to as *the Measures*) under the principle of encouraging innovation while regulating appropriately. *The Measures* stipulate the criteria for the access of NFIs to the payment service market and establish the oversight framework for third-party payment business such as internet payment and bankcard acceptance. Over the past three years, PBC had gained some experience in this field and the supervision was strengthened.

1.1 Formulation of rules promoted

In November 2012, PBC promulgated *Administrative Measures on Prepaid Card Issued by Payment*

Institutions, which regulated the issuance, acceptance, usage, recharge and redemption of prepaid cards. In June 2013, PBC issued *Administrative Measures on Depository of Funds of Payment Institutions' Clients*, which specified the supervisory requirements on management of the clients' funds. In July 2013, PBC released *Administrative Measures on Bankcard Acceptance*, which specified standards on management of risks in verification of contracting merchants, business inspection, transaction monitoring, information security and fund settlement etc.. In October 2013, PBC issued *Verification Mechanism for Funds of Payment Institutions' Clients* which clarified the rights and obligations of relevant parties and improved the supervisory system to protect clients' funds.

1.2 Supervisory measures improved

PBC established off-site supervision mechanisms such as classified supervision, jurisdictions supervision, annual supervision report, quarterly data analysis, material events reporting, etc., strengthened dynamic monitoring of payment business, PBC compiled *Handbook of On-site Inspections on the Payment and Settlement Services* and organized on-site inspections. Following the ad hoc inspection on prepaid card business in 2011, PBC guided the branches to perform ad hoc inspection on bankcard acceptance business in 2013. 132 outlets from 23 payment institutions were inspected and the penalty imposed amounted to CNY 920 000. Afterwards, PBC raised requirements for relevant institutions to rectify their wrong doings, punishment opinions and risk alerts so as to address the issues identified.

1.3 Supervisory mechanism fostered

In May 2011, PBC promoted the establishment of the Payment and Clearing Association of China (PCAC) and encouraged self-discipline for payment services. PCAC had been playing an active role in promoting industry self-discipline and had done a good job in safeguard of market order, prevention of industry risks, exchange and training of its members and publicity of relevant policies. The management structure of governmental regulation, industry self-discipline and institutional internal control had taken shape.

2. Payment institutions were developing fast and becoming more law-binding

2.1 Payment business maintained rapid development

Services of payment institutions had covered all regions of China except Tibet, Qinghai, and Ningxia, and were gradually expanding overseas. In 2013, SAFE allowed 17 qualified payment

institutions to engage in cross-border FX payment services for e-commerce in Beijing, Shanghai, Zhejiang, Chongqing and Shenzhen. With the establishment of China (Shanghai) Pilot Free Trade Zone, more and more payment institutions will participate in the cross-border RMB payment business. In 2013, internet payment handled by payment institutions achieved 15.3 billion in volume and CNY 9 trillion in value. Clients' funds exceeded CNY 100 billion. Market share of payment institutions in the payment service market kept growing.

2.2 Services of payment institutions facilitated people's life

Compared with the payment services provided by commercial banks, the services provided by payment institutions are characterized by low value and vast volume. In 2013, the average value per transaction of non-cash payment (including bills, bankcard, and e-payment) processed by commercial banks was over 100 times more than that by payment institutions. As the complement to commercial banks, payment institutions were oriented to provide low-value payment services and were playing a more and more important role in facilitating people's life.

2.3 Retail payment innovation was furthered

Product innovation and client segmentation had facilitated the development of e-payment (internet payment, mobile payment, digital TV payment etc.), improved customer experience and enhanced the efficiency and quality of payment services. Taking mobile payment for example, in 2013, transactions handled by 37 mobile payment institutions reached 2 billion in volume and CNY 360 billion in value. Mobile payment had played an important role in promoting retail payment services and financial inclusion.

2.4 Payment institutions played an active role in creating jobs

By the end of 2013, over 45 000 employees had been hired by payment institutions. Among these employees, those with bachelor degree or above account for over 50% and those aged below 39 over 90%. Payment institutions are becoming platforms that attract talents. E-commerce fostered by payment institutions had also promoted employment and played an active role in creating jobs, stimulating domestic demand, and speeding up the upgrading of the service industry.

To sum up, the payment service market had been running stably. Compliance awareness of payment institutions was gradually enhanced and business operation was improved. With the establishment of the industry self-disciplinary mechanism, self-binding and self-management of payment institutions had been promoted. Their cooperation with commercial banks was furthered and competition became fairer.

3. PBC will encourage innovation while regulating appropriately

The 18th National Congress of the CPC put forward such requirements as “deepening the reform of the financial system and improving the modern financial system to better contribute to macroeconomic stability and support the development of the real economy” and “improving financial supervision and oversight, promoting financial innovation and maintaining financial stability”. The Third Plenary Session of the 18th Central Committee required that “efforts should be made to strengthen the development of financial market infrastructures and ensure the safe and efficient operation and overall stability of the financial market”.

Next, PBC will (i) implement the requirements of the 18th National Congress of the CPC and the Third Plenary Session of the 18th CPC Central Committee, follow the guideline of “encouraging innovation while regulating appropriately” and ensure the market force to play a decisive role in resource allocation; (ii) strengthen risk management and protect customers’ legitimate interests; (iii) plan for the development of payment services; (iv) guide the market participants to improve innovated payment services so as to better support e-commerce, facilitate people’s life and propel financial inclusion.

First, PBC will protect the legal rights and interests of consumers. The PBC will highlight the protection of consumers’ rights and interests in the formulation of rules, esp. the safety of clients’ fund, information security, information disclosure and reimbursement for the loss caused by fraud. Safeguarding clients’ fund is always the priority of PBC’s supervision over payment institutions. Also, PBC will improve business continuity, prevent the illegal use of payment instruments and help to combat relevant crimes.

Second, The PBC will encourage the innovation of payment services. The PBC will encourage payment institutions to make market-oriented innovations while ensuring the security of the clients’ funds. Besides, PBC will encourage payment institutions and commercial banks to foster cooperation in research and development of products, improvement of services and prevention of risks.

Third, PBC will explore classified and tiered supervision. PBC will perform classified and tiered supervision of payment institutions and their services by attaching great importance to influential payment institutions and material business and performing prudential evaluation of innovations. PBC will mitigate risks triggered by business innovation while ensuring innovation not impeded by excessive administrative power, identify the illegal activities in the disguise of so-called innovation.

Fourth, PBC will support industry self-discipline. PBC will continue to encourage PCAC to (i) promote self-discipline of the industry; (ii) improve self-disciplinary norms, business rules and operation protocols under the supervisory policies; (iii) establish a self-binding and self-management system to foster regular self-discipline and orderly horizontal competition.

Topic 2

Rural Payment Service Environment Greatly Improved

Rural finance is the core of rural economy, and rural payment services are fundamental for the development of rural finance. But in the past, their underdevelopment restrained rural financial services. The extension of the coverage of payment systems in rural areas, the acceleration of fund transfer and the improvement of rural payment service environment play an active role in promoting upgrading and innovation of rural financial services, stimulating rural consumption and then propelling the development of “agriculture, farmers, and rural areas” (SANNONG).

Over recent years, PBC implemented the work arrangement to promote rural and urban integration and provide financial services to SANNONG. Considering towns and villages with no access to financial services and imbalance of payment services allocation between urban and rural areas, PBC formulated a series of policies to promote the improvement of rural payment service environment, the harmonious development of financial services in urban and rural areas and the inclusive increase of payment services.

1. The improvement of rural payment service environment

1.1 The bank account system facilitated the implementation of pro-farmers policies

The PBC took the opportunity of direct payment of subsidy and promoted the open-up of individual bank accounts in rural areas. By the end of 2013, the number of individual bank accounts opened in rural financial institutions had reached 2.41 billion and a total of 1.5 billion bank cards had been issued. Literally, each person had at least one bankcard, each household had at least one account and the subsidy could issued directly to farmers. In 2013, new rural cooperative medical insurance, new rural pension insurance and agriculture-related subsidy paid via bankcard achieved 28 billion in volume and CNY 580 billion in value. Then, farmers can withdrawal the subsidy via POS in contracted stores within the village.

1.2 The coverage of payment and clearing network was further extended to address the appeals of rural financial institutions

PBC facilitated the outlets of rural financial institutions to get access to payment systems of PBC.

RCBFCC kept extending the coverage of its clearing systems so that more rural financial institutions and their outlets could use its clearing services. UnionPay had deployed more POS terminals to extend the coverage of Interbank Bankcard Clearing System in rural areas. Banking institutions keep improving their intrabank clearing systems. Bank institutions continued to improve internal clearing network construction. The PBC encouraged emerging rural banks to process the transactions by agents.

By the end of 2013, over 80 000 outlets of rural financial institutions had been connected to payment systems of PBC, accounting for over 70% of all outlets. Among them, there were 34 103 rural credit cooperatives, 296 rural cooperative banks, 4 906 rural commercial banks and 1 487 township banks. Outlets of commercial banks in rural areas connected to the intrabank clearing systems accounted for over 90% of the total. The clearing systems of RCBFCC had covered nearly 80 000 outlets of small-and-medium-sized rural financial institutions. In 2013, transactions handled by RCBFCC reached 122 million in volume and CNY 2.47 trillion in value.

1.3 The use of non-cash payment instruments was promoted in rural areas

Bankcard business grew fast in rural areas. Taking the opportunity of direct payment of subsidy, agriculture-related banks had issued more bankcard in rural areas than before. Also, they had fostered the use of bankcard by deploying fund-transfer telephones in rural areas, establishing barrier-free card-swipe demonstrative blocks, rewarding those using bankcards, and promoting Featured Bankcard Services for Migrant Workers and Services Facilitating Cash Withdrawal with Bankcards in Rural Areas.

Internet payment and mobile payment were promoted. With the assistance of agriculture-related banks, the trade of agricultural products could be settled via internet or mobile POS etc.. Payment institutions also explored a business mode for mobile payment which made collection of call charge via SMS possible.

The development of bills remained stable. Cheques and drafts were still the predominant payment instruments in rural wholesale market and agricultural supply market and also important for rural enterprises.

By the end of 2013, bankcard issued in rural areas had achieved 1.5 billion and bankcard per capita 1.74. Fund-transfer telephone deployed were 2.75 million, POS 1.7 million and ATM 0.2 million.

1.4 The rules and policies concerning rural payment services were further consolidated

Law of Negotiable Instruments, Administrative Measures on Management of RMB Bank Settlement Accounts, and Measures on Payment and Settlement are the fundamental regulation and rules in payment and settlement area.

In order to further promote the scientific development of rural payment services, PBC released a series of regulatory documents such as *Guiding Opinions on the Improvement of the Payment Service Environment in Rural Areas* (Yinfa〔2009〕No.224), *Guiding Opinions on Promoting Payment and Settlement Services in Rural Areas* (Yinfa〔2006〕No.272), *Notice on Promoting Services Facilitating Cash Withdrawal with Bankcards in Rural Areas* (Yinfa〔2011〕No. 177), *Guiding Opinions on the Access of Rural Credit Cooperatives to Payment Systems* (Yinfa〔2004〕No. 250), *Notice on Releasing the Administrative Measures on Supervision of Rural Credit Banks Funds Clearing Center Corporation Limited* (Yinfa〔2013〕No.30), and *Notice on Further Promoting Featured Bankcard Services for Migrant Workers* (Yinbanfa〔2006〕No.293). The documents specify the guiding opinions and requirements for the improvement of rural payment service environment and promote the rural payment services to develop in a safe and regulated way.

The continuous improvement of rural payment services had enhanced finance inclusion in China, and was highly appraised by the international society. In August 2012, the World Bank pointed out that based on a report called *Financial Inclusion in the People's Republic of China*^①, China's financial inclusion has been improved mainly because bank institutions facilitated the opening of bank accounts and use of bankcard for low-income people. In June 2013, EMEAP-WGPSS conducted a survey to better understand the practice of financial inclusion in China.

The improvement of financial inclusion has promoted poverty reduction in China. It will be easier for low-income farmers or the poor Chinese families to get out of poverty if the access to financial subsidies, agricultural credit and other basic financial services via bank accounts and bankcard is facilitated. According to the statistics of the World Bank, the population in poverty across the world decreased by 720 million from 1981 to 2010, of which 660 million were from China. In April 2013, the World Bank and the United Nations jointly issued *the World Development Indicators* which praised China for the contribution to the world's poverty reduction and successful experience in these fields.

^① The report is a joint publication of CGAP(the Consultative Group to Assist the Poor) and the Working Group on Inclusive Finance in China.

2. The rural payment services with distinct characteristics

2.1 Services Facilitating Cash Withdrawal with Bankcards in Rural Areas (referred to as the Services in this section)

2.1.1 Basic information

In recent years, favorable policies such as agricultural subsidies, new rural pension insurance, and new rural cooperative medical insurance had been promulgated and farmers were paid via bankcard. However, it is still inconvenient for farmers to withdraw money because most villages locate in remote areas lacking convenient transportation, financial institutions or infrastructures. And the existing financial outlets are mostly in towns and counties. It will cost farmers a lot of time and transportation fees to go there to withdraw money.

To address the questions above, PBC launched the pilot of Services Facilitating Cash Withdrawal with Bankcards in Rural Areas in many provinces and cities in 2010. The low-value cash withdrawal and balance inquiry services were provided via acceptance terminals deployed at designated merchants in villages and were spoken highly of by local governments, farmers and the society. In 2011, PBC issued *Notice on Promoting Services Facilitating Cash Withdrawal with Bankcards in Rural Areas*, which required that services of facilitating cash withdrawal with bankcards in Rural Areas should be promoted in all eligible villages nationwide by the end of 2013.

By the end of 2013, the merchants providing Services Facilitating Cash Withdrawal had amounted to over 850 000. Over 480 000 villages were covered, accounting for above 80% of the administrative village with no access to financial services. A “convenient payment channel” was formed and the payment service environment in rural areas was further improved.

2.1.2 Major service features

2.1.2.1 Convenience

Farmers can withdraw money from designated merchants in their village conveniently via bankcard. After they input the amount and password correctly by POS, bank institutions debit the farmers' bank account, and credit the merchant's bank account. Then, the merchant will give the money to the farmers.

2.1.2.2 Favorable charges

Farmers in the remote areas are most vulnerable and need to be supported. Hereby, PBC requests banks to provide local cash withdrawal and balance inquiry service for free and other financial services with discounted charges. The relevant charges are paid by service providers basically.

2.1.2.3 Security and reliability

It is not easy for farmers to earn money. Thus PBC is obliged to ensure their fund security. Such measures had been taken: (i) requiring the financial institutions to establish access, surveillance and exit mechanism for acquirers; (ii) requesting service terminals and acquirers to be creditworthy and law-abiding; (iii) merely allowing the use of fixed-line POS terminals and encrypted telephones to avoid the leakage of card information or other risk events; (iv) limiting the scope of the Services to rural towns and administrative villages; (v) setting the upper limit of cash withdrawal at CNY 1 000 per card each day; (vi) requiring the merchants to record withdrawal information per transaction and replace the paper money on site upon request.

2.1.2.4 Publicity of the Services

Branches of PBC organized the bank institutions to publicize the Services to farmers so as to educate and reassure them. Also, PBC introduced the work done in the improvement of rural payment service environment by publishing articles and opening columns on PBC's official website and in *Financial News*.

2.1.3 Role and effect

2.1.3.1 Farmers could withdraw money within the village instead of going to the bank outlets far away so as to save time and transportation cost

According to the statistics, cash withdrawn at the contracting stores in the villages achieved 92 million in volume and CNY 28 billion in value. If each transaction could save 10 yuan for transportation and food cost and 4 hours of commuter time, the Services could save CNY 920 million and 368 million hours in total for the farmers.

2.1.3.2 The Services serve as a new way to develop inclusive finance

Farmers in remote areas are able to withdraw money via bankcard and acceptance terminals. This is a new way to directly provide financial services for low-income population in rural areas.

2.1.3.3 The Services get the farmers to benefit from the development of the payment system in China, implement the pro-farmer policies and thus enhanced the image of the Party and the government

According to the statistics, direct subsidies issued to farmers via bankcard amounted to 5.2 billion in volume and CNY 280 billion in value. Farmers can then withdraw the subsidies conveniently by the Services.

2.2 Featured Bankcard Services for Migrant Workers

2.2.1 Basic information

PBC promoted Featured Bankcard Services for Migrant Workers (referred to as “the Services” in this section) in 2006, in order to address the inconvenience for migrant workers to carry large amount of cash to hometown and the difficulty in cash withdrawal back at home. With the Services, the outlets of rural credit cooperatives and Postal Savings Bank of China are connected to the network of UnionPay. Thus, migrant workers can use any debit card to withdraw money from the counter of rural credit cooperatives and Postal Savings Bank of China in their hometown. The services were praised by the State Council and warmly welcomed by farmers for the reason that the services (i) implement the scientific outlook on development; (ii) enhance rural financial services, facilitate payment and settlement of rural credit cooperatives; (iii) meet the demand of migrant workers to withdraw cash at home.

2.2.2 Major service features

2.2.2.1 Using the network of UnionPay

The Services are processed as follows: (i) interbank exchange network of UnionPay connects card-issuing system of issuers with card-accepting system of acquirers; (ii) acquirers accept cards at the counter and provide interbank cash withdrawal and inquiry transactions services via their comprehensive business processing system; (iii) fund is settled by HVPS or CIS after transactions are transferred and cleared by UnionPay; (iv) errors are fixed by the platform of UnionPay. All bankcards issued by members of UnionPay are open to the Services.

2.2.2.2 Designated specific acquirers

Migrant workers mostly come from villages and towns. The outlets of rural credit cooperatives and Postal Savings Bank of China are the major financial institutions in rural areas, especially in villages. Hereby, PBC promoted rural credit cooperatives and Postal Savings Bank of China to accept the Services.

2.2.2.3 Specifying limits

All the common debit cards issued by domestic banks are available for the Services. No more than CNY 5 000 can be withdrawn per card each day.

2.2.2.4 Discount and special distribution in interchange fees

For the purpose to encourage migrant workers to use bankcard, the interchange fee have been further lowered from 1% of cash withdrawal amount to 0.8% since 1st Feb. 2007. The interchange fee per transaction was capped at CNY 20 rather than CNY 50 (CNY 1 at a minimum). The distribution of the

interchange fees among issuing banks, acquirers and UnionPay is 3 : 6 : 1, tilting towards the acquirers.

2.2.2.5 Organizing propaganda campaigns

In 2007, PBC organized the campaigns to publicize the Services, esp. before/after the Spring Festival when migrant workers went back/left home. Meanwhile, branches of PBC occasionally led relevant parties to go to villages, the workplace of migrant workers or train stations and carry out propaganda campaigns in diversified ways.

2.2.3 Role and effect

2.2.3.1 Facilitating migrant workers to withdrawal money in their hometown

Since Featured Bankcard Services for Migrant Workers are available, migrant workers no longer need to take large amount of cash to go home. Thus, the risks that their money might be stolen or robbed were mitigated. The Services have built a “world without thieves” payment channel. In 2013, the transactions accumulated to 14 million in volume and CNY 21 billion in value.

2.2.3.2 Improving the fund settlement of acquirers, especially rural credit cooperatives

By the end of 2013, Featured Bankcard Services for Migrant Workers had gone live in the outlets of rural cooperative financial institutions in Guizhou, Hunan and other major migrant workers output provinces (municipalities and autonomous regions) and the outlets of Postal Savings Bank of China in 31 provinces (municipalities and autonomous regions) across the country.

3. The policy considerations

Over the recent years, PBC has been promoting the improvement of rural payment service environment for the purpose to better serve “agriculture, farmers and rural areas”. Here are the major policy considerations.

3.1 Available to use

Availability means payment services and products are available in rural areas. Many measures have been taken to address this consideration.

3.1.1 Services Facilitating Cash Withdrawal with Bankcards in Rural Areas had been promoted

The contracted merchants in remote areas can not only provide such services as cash withdrawal and utility fee collection, but also serve as a window for the farmers to learn about financial services like

bankcard, anti-counterfeit money, credit information inquiry and loan. The Services started in pilots from 2010 and have covered almost all eligible administrative villages.

3.1.2 Payment and clearing systems are extended to rural areas

In some villages, agriculture-related subsidies are transferred via BEPS and then booked into the farmers' accounts directly.

3.1.3 The use of non-cash payment instruments was propelled

PBC takes the opportunity of subsidy payment to promote farmers to open bank settlement accounts and use bankcard. Also, PBC encourages internet payment and mobile payment in eligible rural areas and advance bill business steadily.

3.1.4 The acceptance terminals such as fund transfer telephones, regular POS and ATM etc. are placed to facilitate the use of bankcard by farmers.

3.1.5 Outlets of banks have increased in quantity and improved in layout

With the economic development in rural areas, banks have been improving the layout of their outlets concerning the regional development differences.

3.2 Daring to use

Farmers have got used to make settlement by cash and they seem to have more faith in visible instruments like cash and bankbook. The non-cash payment instruments are kind of invisible, farmers are afraid of losing money or getting cheated. Thus, they dare not use them. In order to remove their doubts, PBC and other relevant parties had taken multiple measures.

I. PBC enhanced farmers' awareness of risks and guided them to use bankcard and bank settlement accounts safely.

II. Payment service providers such as banks advanced compliance management, risk awareness and internal control of their outlets by improving mechanisms, case warning, risk alerts and safety education, taking both internal corruption and external fraud into consideration.

III. PBC and other relevant authorities strengthened the crackdown of crimes in payment and settlement area. In 2009, a nationwide crackdown on bankcard related crimes was launched by PBC and the MPS, which strongly stroke bankcard related crimes including rural areas and established an

effective working mechanism.

3.3 Able to use

Bankcard, online payment, mobile payment and other modern modes of payment are novelty things for farmers who are not well educated and unable to use them. To address this problem, PBC highlighted two types of people and let them teach farmers how to use non-cash payment services step by step. One type is the staff in outlets of rural banks or the designated merchants providing cash withdrawal services. They got familiar with the process of non-cash payment services after training. Then, they could handle business properly for clients and meanwhile disseminate how to use the business to farmers. The other type is the younger farmers, who are generally better educated than their parents, more easily adapted to new things, and used to work in cities. The promotion of non-cash payment services for them worked out well since they could influence the older generation and also teach them how to use the services.

3.4 Willing to use

Cash transactions are free of charge while non-cash payment services are usually charged with certain amount of interchange fee. Farmers generally earn low incomes and are sensitive to prices. If the fees are not cheap enough, farmers are not willing to use the services. Hereby, discounts on interchange fees shall be provided to encourage farmers to use non-cash payment services. Therefore, PBC promoted Featured Bankcard Services for Migrant Workers and Services Facilitating Cash Withdrawal with Bankcards in Rural Areas. Favorable interchange fees are offered to farmers. In respect of Featured Bankcard Services for Migrant Workers, interchange fees have been reduced twice and both are substantially lower than market prices of the similar services. In respect of Services Facilitating Cash Withdrawal with Bankcards in Rural Areas, interchange fee are fairly cheap, even for free so as to motivate farmers to use the Service.

4. Experience and principles in the improvement of rural payment service environment

4.1 Demand-driven and adapted to reality

The development of rural payment service environment shall be in consistent with rural economic and financial growth. PBC formulated practical policies and promoted safe and easy non-cash payment products for farmers, rooted in reality in rural areas and in accordance with local economy, resources, and demand-supply situation in payment services. It is discouraged to simply push

forward the mature products in urban areas to rural areas.

4.2 Encouraging innovation and diversifying service providers

The following measures were taken in this regard: (i) respecting the innovation of the grassroots and learning from their practices in improving rural payment service environment; (ii) encouraging different types of service providers to participate in rural payment service market, and motivating them to take their respect advantages and promote the innovation in rural payment services.

4.3 Market-oriented and government-supported

PBC sticks to the following principles: (i) giving full play to market force in resource allocation with the support of government and improving stimulus and binding mechanisms; (ii) coordinating with Ministry of Finance, State Administration of Taxation, Ministry of Agriculture, Ministry of Commerce and other regulators to better support the development of rural payment service environment and encourage necessary resources to tilt towards the rural areas.

4.4 Scientific design, progressive development and allowing flexibility

PBC chose 42 villages with no access to financial services as pilots while promoting Services Facilitating Cash Withdrawal with Bankcards in Rural Areas and rolled them out nationwide a year later. For those areas with no electricity, no communication signals and other underdeveloped infrastructures, it is indispensable to develop relevant infrastructures first rather than simply expand the stands that provide cash withdrawal services.

4.5 The prevention of risks and enhancement of farmers' risk awareness

Farmers are generally not well aware of risks and not very capable to control them. Thus, PBC has been underlining the prevention of risks and the protection of farmers' legitimate interests while formulating relevant rules and policies. In the meantime, PBC has paid great attention to propaganda. Financial knowledge and the common sense were introduced to farmers in a vivid and easy way so as to improve their self-protection capacity.

5. Challenges and outlook

Despite some achievements, the improvement of rural payment service environment is still facing difficulties and challenges.

First, the outlets of financial institutions in rural areas are limited in coverage and the differences in economic development and folk custom enormous. It is hard for financial institutions to address farmers' appeals featured by high degree of dispersion and differentiation through standardized and scale services.

Second, farmers are used to make settlements by cash. It will take some time to persuade them to use bankcard, internet payment and other non-cash payment methods. Meanwhile, the risk awareness of farmers and professional competence of relevant staff need to be further improved.

Third, the favorable policies shall be intensified. Some policies like Services Facilitating Cash Withdrawal with Bankcards in Rural Areas have exerted positive social impact, but relevant service providers get little economic benefit from them or even make loss due to the low interchange fees. As far as we are concerned, some stands have ceased the services and acquiring terminals are uninstalled. Favorable policies to address the issue are indispensable for the purpose to promote the services and the coverage of the terminals.

The improvement of rural payment service environment is a long-term and difficult task. Next, PBC will (i) implement the policies of “strengthening agriculture, benefiting farmers and enriching rural areas” and “promoting the integration of urban and rural areas” proposed by the 18th National Congress of the CPC; (ii) retrospect on the experience and analyze the issues and deficiencies identified in the work done; (iii) further promote the development of rural payment service environment with the orientation to address the payment service appeals of agriculture, farmers and rural areas; (iv) organize comprehensive pilot on the improvement of rural payment service environment; (v) summarize the experiences gained from mobile payment pilot and promote suitable business mode in rural areas; (vi) strengthen the propaganda of relevant policies and urge the improvement of risk control of relevant parties. The purpose of the above mentioned measures is to further propel the inclusive development of payment services in rural areas, establish multiple-layered, low-cost and sustainable rural payment system so as to lay solid foundation for the financial integration of urban and rural areas.

Part IV

Appendices

- Major Events of Payment System Development in 2013
- Core Indicators for Payment System Development in 2013
- Statements on Key Payment Services in 2013

Appendix 1 Major Events of Payment System Development in 2013

On January 6th, PBC approved the application of 28 qualified non-financial institutions (26 institutions made applications for the first time and 2 for additional business). These institutions were permitted to engage in the authorized payment business in certain regions.

On January 8th, PBC released *Notice on Requirements of Changes Made by Payment Institutions* with specified terms and procedures of changes made by payment institutions, in order to prevent payment institutions from evading rules by unauthorized changes.

On January 29th, PBC released *Administrative Measures on the Supervision of Rural Credit Banks Funds Clearing Center* to further strengthen the regulation of RCBFCC.

On February 1st, SAFE issued *Guidance on Pilot Project of FX Payment Service Provided by Payment Institutions to Facilitate Cross-border E-commerce*, which allowed qualified payment institutions to engage in cross-border payment services in Beijing, Shanghai, Zhejiang, Chongqing and Shenzhen.

On February 19th, PBC released *Notice on Ensuring the Smooth Implementation of Bankcard Interchange Fee Adjustment*, to guarantee the new criteria to come into effect from February 25th.

In February, PBC published *Handbook of On-site Inspections on the Payment and Settlement Services Provided by Banking Institutions*.

From February to October, PBC organized the branches to carry out comprehensive supervision and special inspection to propel the payment and settlement services of commercial banks to develop in a normative way, enhance the compliance and risk awareness of payment institutions and promote the implementation of relevant policies.

PBC attended the 4 regular meetings (March 12th-13th, June 17th, September 23rd and November 18th-20th) held by Committee on Payment and Settlement Systems (CPSS) and the meetings held by steering group of the CPSS-IOSCO review of standards in 2013. The meetings mainly discussed the progress in payment and settlement area.

On March 25th-26th and September 26th-27th, PBC organized the 28th Bangkok meeting and the 29th Seoul meeting as the chairman of Working Group on Payment and Settlement Systems for

Executives' Meeting of East Asia and Pacific Central Banks (EMEAP-WGPSS) respectively. PBC carried out the survey of financial inclusion in EMEAP countries.

On April 12th, SHCH initiated to provide the net clearing services of RMB/FX inquiry trading in the interbank foreign exchange market instead of CFETS.

On April 12th, PBC released *Administrative Measures on Printing of Banks' Bills and Certificates* which came into effect from June 1st to promote the reform and strengthen the management of the printing of banks' bills and certificates.

On April 16th, SHCH held the press to release the central clearing service of RMB FFA and the service was formally launched.

On May 2nd, ACS started the first pilot run successfully in Beijing processing center, operation offices of Jinan branch and Jining central sub-branch of PBC.

On May 8th, PBC released *Payment Statistical Indicators* including a series of financial criteria, in order to improve the efficiency of payment information analysis and promote the development of the payment system in a scientific way.

On May 20th, UnionPay declared to join the EMVCo.

On June 7th, PBC released *Administrative Measures on Depository of Funds of Payment Institutions' Clients* to strengthen the management of clients' funds by regulating the depository, accumulation, use and transfer of clients' funds.

On July 5th, PBC promulgated *Administrative Measures on Bankcard Acceptance Services* to establish a distinct supervisory framework and penalty mechanism.

On July 6th, PBC approved the business application of 38 qualified non-financial institutions (27 institutions made applications for the first time and 11 for additional business). These institutions were permitted to engage in the authorized payment business in certain regions.

On August 22nd, PBC released *Notice on Implementing PFMIs*.

On August 22nd, PBC released *Notice on Online Clearing Pilot of Electronic Commercial Drafts* to organize finance companies to perform on-line clearing and promote the use of electronic commercial drafts.

On September 4th, PBC released *Rules for Law Enforcement Inspection in Payment and Settlement*

Field to set up a standardized and normative mechanism.

On September 10th, PBC released *Notice on Implementation Plan of Statistical and Analysis System of Payment Information* to clarify responsibilities of relevant departments and the schedule of system development.

On October 8th, CNAPS II went live successfully.

On October 9th, PBC released *Decision on Awards to Advanced Groups and Outstanding Individuals in the Improvement of Rural Payment Service Environment*.

On October 14th, Ma Kai, Vice Premier of the State Council, commented on the smooth launch of CNAPS II.

On October 24th-25th, PBC held the 4th PBC-ECB bilateral meeting to share experience in retail development, oversight of the payment, RTGS, collateral management and securities settlement systems.

On October 28th, PBC released *Verification Mechanism for the Funds of Payment Institutions' Clients* to require payment institutions and their respective depository banks to perform reconciliation and ensure the consistency of the booking and relevant information.

On December 6th, PBC and CSRC jointly released *Notice on Conducting Assessments of Observance against the PFMIs*.

On December 31st, PBC completed the identity verification of individual RMB deposit accounts.

Appendix 2 Core Indicators for Payment System Development in 2013

Item		Unit	Numerical value	Growth rate	
M ₀ and GDP		M ₀	CNY trillion	5.86	7.13%
		M ₀ /GDP	%	10.30	-0.23%
Bank settlement accounts	Individual accounts	Total number of accounts	100 million accounts	56.07	14.95%
		Number of accounts per capita	Account	4.13	12.84%
	Corporate accounts	Total number of accounts	10 000 accounts	3 558.06	12.26%
		Incl.: Basic deposit accounts	10 000 accounts	2 162.35	13.54%
Non-cash payment instruments		Transaction volume	100 million transactions	501.58	21.92%
		Incl.: Bills	100 million transactions	6.93	-11.61%
		Bankcards	100 million transactions	475.96	22.31%
		Remittance	100 million transactions	18.37	30.28%
		Transaction value	CNY trillion	1 607.56	24.97%
		Incl.: Bills	CNY trillion	287.70	-2.93%
		Bankcards	CNY trillion	423.36	22.28%
		Remittance	CNY trillion	880.42	39.97%
		Transaction Value/GDP	Time	28.26	3.49%
Bankcards (issuance and acceptance)	Domestic	Number of issuers	Institution	491	53.92%
		Cumulative number of cards issued	100 million cards	42.14	19.23%
		Incl.: Debit cards	100 million cards	38.23	19.36%
		Credit cards	100 million cards	3.91	18.03%
		Number of cards per capita	Card	3.11	17.80%
		Number of chartered merchants	10 000 merchants	763.47	57.98%
		Number of POS terminals	10 000 machines	1 063.21	49.37%
		Number of ATM terminals	10 000 machines	52.00	25.12%
		Outstanding credits of credit cards at the end of the period	CNY 100 million	18 423.61	61.80%
		Bankcard penetration rate	%	47.45	3.95%
	Overseas	Number of accepting countries	Countries	142	5.19%
		Number of accepting merchants	10 000 merchants	1 201.74	523.05%
		Number of POS terminals	10 000 machines	616.74	165.73%
		Number of ATM terminals	10 000 machines	109.01	8.74%
		Transaction volume	10 000 transactions	15 400	31.61%
		Transaction value	CNY 100 million	4 720	21.69%

continued

Item			Unit	Numerical value	Growth rate
Payment system	RMB payment system	Transaction volume	100 million transactions	288.04	29.65%
		Incl.: HVPS	100 million transactions	5.95	26.60%
		BEPS	100 million transactions	10.40	37.75%
		Transaction value	CNY trillion	2 939.61	17.24%
		Incl.: HVPS	CNY trillion	2 060.76	16.30%
		BEPS	CNY trillion	20.32	9.54%
		Transaction value/GDP	Time	51.67	3.39%
		Direct participants of HVPS	Participants	1 790	-0.50%
	CDFPCS	Transaction volume	10 000 transactions	139.44	25.57%
		Transaction value (in USD)	USD 100 million	7 151.14	34.16%
		System participants	Participants	39	5.40%
Securities settlement system	Interbank bond market	Issuing volume	CNY trillion	8.70	9.05%
		Custody volume	CNY trillion	29.48	13.39%
		Settlement volume	CNY trillion	270.82	1.15%
		Accepting value	CNY trillion	4.43	21.80%
	Securities market of exchange	Transfer volume	100 million transactions	57.16	38.84%
		Transfer value	CNY trillion	342.89	63.41%
		Gross settlement value	CNY trillion	355.30	49.21%
		Net settlement value	CNY trillion	13.62	38.13%

Notes:

1. The growth rate of M_0 /GDP is the figure of current year minus that of previous year.
2. Cumulative number of cards issued excludes dormant cards (i.e., any debit card with a balance of not more than CNY 10 and having no transaction for more than one year).
3. Overseas related data of bankcards refers to that of UnionPay cards.
4. RMB payment systems include HVPS, BEPS, CIS, IBPS, ACH, intra-bank payment systems of banking institutions, UnionPay Bankcard Interbank Clearing System, Draft Processing System and Payment and Clearing System for City Commercial Banks, and Payment and Clearing System for Rural Credit Banks.

Appendix 3 Statements on Key Payment Services in 2013

1. Statements of Payment Instruments

Table A1 Structure of Payment Instruments

Unit: 10 000 transactions / CNY 100 million

Type	Item	Volume	Value
Bills	Bank draft	377.13	21 587.28
	Incl.: Bank draft for cash withdrawal	4.74	45.19
	Bank draft for fund transfer	372.38	21 542.09
	Commercial draft	1 630.67	182 409.49
	Incl.: Commercial acceptance draft	21.13	6 685.14
	Banker's acceptance draft	1 609.54	175 724.35
	Promissory note	626.17	60 278.65
	Incl.: Promissory note for cash withdrawal	1.86	55.06
	Promissory note for fund transfer	624.31	60 223.59
	Cheque	66 700.19	2 595 621.84
	Incl.: Cheque for cash withdrawal	21 702.69	171 631.52
	Cheque for fund transfer	44 997.50	2 423 990.33
	Incl.: Entities' cheque	65 820.18	2 589 858.28
	Personal cheque	880.01	5 763.56
	Domestic letter of credit	8.61	17 071.25
	Total	69 342.76	2 876 968.51

continued

Type \ Item		Volume	Value
Bankcards	Cash deposit	794 171.17	666 058.47
	Cash withdrawal	1 811 712.78	707 988.82
	Incl.: Cash withdrawal via ATM	1 287 452.83	193 551.29
	Consumption	1 297 095.46	318 315.25
	Transfer	856 577.55	2 541 239.04
	Total	4 759 556.97	4 233 601.58
Settlement methods	Remittance	183 717.28	8 804 179.43
	Collection with acceptance	62.12	6 684.84
	Collection	3 151.72	154 179.21
	Incl.: Local special collection	1 951.01	7 194.79
	Commercial acceptance draft	23.62	8 936.55
	Banker's acceptance draft	1 168.96	135 327.75
	Total	186 931.12	8 965 043.48

Table A2 Annual Statement

Bank \ Item	Volume of bankcards							
	Volume of bankcards issued in the current period				Volume of bankcards issued by the end of the period			
	Credit cards	Quasi-credit cards	Debit cards	Subtotal	Credit cards	Quasi-credit cards	Debit cards	Subtotal
State-owned commercial banks	3 215.83	813.72	34 292.89	38 322.44	17 319.56	4 532.38	195 651.63	217 503.56
Joint-stock commercial banks	3 854.69	0.00	6 443.11	10 297.79	15 422.26	147.12	43 665.16	59 234.54
City commercial banks	165.14	7.15	3 887.40	4 059.69	783.66	19.87	20 654.05	21 457.59
Rural commercial banks	84.63	2.80	5 198.84	5 286.27	237.18	23.60	23 898.03	24 158.81
Rural credit cooperatives	27.16	0.37	8 349.86	8 377.39	43.54	0.00	31 418.04	31 461.58
Foreign-invested banks	29.39	0.00	29.81	59.20	40.56	0.00	173.26	213.81
Postal Savings Bank of China	152.28	0.00	11 054.86	11 207.14	509.51	0.00	66 849.88	67 359.40
Total	7 529.11	824.04	69 256.76	77 609.91	34 356.27	4 722.97	382 310.04	421 389.28

Note: "0.00" in the table means the data is between 0 and 0.005, the same as below.

of Bankcard Business

Unit: 10 000 cards / 10 000 transactions / CNY 100 million / 10 000 machines

Fund transactions										
Cash deposit		Cash withdrawal		Consumption		Transfer		Subtotal		Number of ATMs
Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	
449 989.94	358 166.37	1 066 887.82	402 812.67	735 032.04	189 776.40	572 080.80	1 509 103.19	2 823 990.60	2 459 858.63	28.92
95 824.59	73 824.96	142 715.57	51 962.68	410 962.64	80 181.77	125 146.69	634 583.73	774 649.49	840 553.13	6.97
26 176.32	37 768.82	70 932.44	43 167.35	29 361.78	12 140.02	31 586.26	93 619.45	158 056.80	186 695.64	2.58
40 412.75	54 983.43	105 246.37	59 989.40	19 268.51	13 484.47	51 624.93	136 734.12	216 552.56	265 191.42	4.26
56 627.34	69 953.59	119 999.13	75 446.21	12 919.25	10 479.11	47 624.23	122 281.51	237 169.95	278 160.43	4.28
141.01	185.04	900.28	217.17	741.01	279.31	127.26	965.66	1 909.56	1 647.17	0.08
124 999.22	71 176.26	305 031.18	74 393.32	88 810.22	11 974.15	28 387.37	43 951.37	547 227.99	201 495.10	4.90
794 171.18	666 058.46	1 811 712.79	707 988.80	1 297 095.45	318 315.23	856 577.54	2 541 239.03	4 759 556.96	4 233 601.52	52.00

2. Statements of Payment and Clearing Systems

Table A3 Business of HVPS

Month	Business of HVPS	
	Volume	Value
January	4 956.08	1 854 382.90
February	3 423.03	1 344 318.12
March	4 368.30	1 844 453.10
April	4 580.72	1 794 121.31
May	4 868.74	1 793 209.57
June	4 483.70	1 586 650.49
July	5 297.83	1 770 781.43
August	4 990.28	1 635 022.76
September	5 501.93	1 795 726.00
October	4 961.55	1 506 286.34
November	5 515.97	1 694 348.52
December	6 600.55	1 988 331.32
Total	59 548.68	20 607 631.86

and BEPS of the PBC

Unit: 10 000 transactions / CNY 100 million

Business of BEPS		Subtotal	
Volume	Value	Volume	Value
7 859.74	29 874.47	12 815.82	1 884 257.37
5 625.69	12 243.84	9 048.72	1 356 561.96
7 442.14	15 707.17	11 810.44	1 860 160.27
7 803.22	15 186.72	12 383.94	1 809 308.03
8 353.09	14 919.45	13 221.83	1 808 129.02
7 958.47	16 502.96	12 442.17	1 603 153.45
9 093.68	16 123.88	14 391.51	1 786 905.31
9 277.34	15 391.02	14 267.62	1 650 413.78
9 723.99	16 431.62	15 225.92	1 812 157.62
8 839.62	14 747.47	13 801.17	1 521 033.81
10 193.38	16 459.13	15 709.35	1 710 807.65
11 857.12	19 566.38	18 457.67	2 007 897.70
104 027.48	203 154.11	163 576.16	20 810 785.97

Table A4 Annual Statement of

Bank \ Item	Bill presenting			
	Debit		Credit	
	Volume	Value	Volume	Value
Policy banks	4.25	576.21	31.42	5 715.73
State-owned commercial banks	8 960.41	74 895.93	6 487.29	219 594.46
Joint-stock commercial banks	4 210.43	35 870.89	3 454.41	130 303.38
City commercial banks	1 516.06	23 843.61	2 697.02	79 118.11
Rural commercial banks	1 168.32	15 517.31	1 912.03	37 145.17
Rural credit cooperatives	467.15	4 199.48	819.41	17 340.57
Foreign-invested banks	25.38	565.53	105.32	3 125.01
Postal Savings Bank of China	196.59	2 177.36	142.69	6 089.18
Others	4 927.53	5 951.38	4 746.22	20 863.58
Total	21 476.11	163 597.69	20 395.81	519 295.19

Notes: 1. This table is filled by local bills clearing houses based on their business of bill clearing.

2. Others refers to the PBC branches.

3. The data of urban credit cooperatives merged into the data of city commercial banks.

Local Bill Clearing Business

Unit: 10 000 transactions / CNY 100 million

Bill receiving				Gross value payable	Gross value receivable
Debit		Credit			
Volume	Value	Volume	Value		
16.10	841.57	17.72	5 082.88	6 557.30	5 659.09
11 762.26	83 589.01	10 905.46	245 720.76	303 183.47	320 616.69
2 310.05	37 892.16	2 938.25	113 376.64	168 195.54	149 247.53
1 753.30	19 994.72	1 695.40	54 261.71	99 112.83	78 105.32
1 542.41	11 586.80	1 432.82	31 037.58	48 731.97	46 554.89
2 440.87	3 147.25	710.92	14 101.12	20 487.82	18 300.60
37.22	626.79	48.61	2 557.93	3 751.80	3 123.46
1 473.91	1 772.99	916.25	5 984.07	7 862.17	8 161.43
139.86	4 146.39	1 730.24	47 172.48	25 009.97	53 123.86
21 475.98	163 597.68	20 395.68	519 295.18	682 892.87	682 892.87

Table A5 Payment Business of Intra-bank Payment

Bank \ Volume/Value	Debit	
	Volume	Value
Policy banks	0.00	0.12
State-owned commercial banks	235 173.29	793 658.17
Joint-stock commercial banks	36 775.51	436 911.93
City commercial banks	22 223.13	306 787.64
Rural commercial banks	51 432.00	147 588.26
Rural credit cooperatives	19 933.87	75 319.76
Foreign-invested banks	0.28	43.21
Postal Savings Bank of China	1.56	19.58
Total	365 539.49	1 760 326.74

Note: The data of urban credit cooperatives merged into the data of city commercial banks.

Systems of Banking Financial Institutions

Unit: 10 000 transactions / CNY 100 million

Credit		Subtotal	
Volume	Value	Volume	Value
73.24	9 336.42	73.24	9 336.54
490 184.30	3 222 809.78	725 357.58	4 016 467.95
70 941.51	1 389 351.97	107 717.02	1 826 263.89
17 975.54	518 604.11	40 198.68	825 391.75
50 706.33	196 088.52	102 138.33	343 676.78
22 505.32	141 176.91	42 439.19	216 496.67
70.79	109 323.61	71.07	109 366.82
57 919.05	105 208.34	57 920.61	105 227.92
710 376.03	5 691 897.70	1 075 915.52	7 452 224.44

Table A6 Annual Statement of Interbank

Bank \ Item	Cash Deposit			
	Issuance		Acceptance	
	Volume	Value	Volume	Value
State-owned commercial banks	334 622.36	134 332.33	293 219.96	75 884.81
Joint-stock commercial banks	256 158.09	64 243.38	116 902.06	75 099.95
City commercial banks	23 279.92	9 313.46	29 890.21	10 279.98
Rural commercial banks	9 040.36	3 449.49	11 556.57	2 736.21
Rural credit cooperatives	21 299.58	15 738.36	17 597.82	8 883.97
Foreign-invested banks	694.28	239.40	204.82	157.19
Postal Saving Bank of China	33 402.07	9 883.50	9 998.27	2 332.31
Others	1 170.35	285.77	200 297.29	62 111.26
Total	679 667.01	237 485.69	679 667.01	237 485.69

Transactions of Bankcards

Unit: 10 000 transactions/CNY 100 million

Cash withdrawal							
ATM				Counter			
Issuance		Acceptance		Issuance		Acceptance	
Volume	Value	Volume	Value	Volume	Value	Volume	Value
1 566.54	854.49	1 509.06	823.47	0.00	0.00	0.00	0.00
555.60	284.48	483.25	258.52	2.04	27.99	0.21	1.77
274.46	152.65	248.01	142.04	24.48	243.67	26.67	275.09
295.38	78.48	339.66	85.71	0.97	14.44	0.47	7.86
822.61	418.10	868.35	436.53	0.01	0.01	0.00	0.00
2.95	1.89	2.46	1.63	0.00	0.00	0.00	0.00
426.48	81.20	439.18	99.33	0.00	0.00	0.00	0.00
8.22	6.87	62.26	30.92	0.08	0.99	0.22	2.38
3 952.23	1 878.15	3 952.23	1 878.15	27.57	287.10	27.57	287.10

Table A6 Annual Statement of Interbank

Bank	Item	POS Consumption			
		Issuance		Acceptance	
		Volume	Value	Volume	Value
	State-owned commercial banks	0.58	0.09	0.00	0.00
	Joint-stock commercial banks	650.07	699.20	171.76	328.48
	City commercial banks	310.11	1 197.80	612.07	1 371.36
	Rural commercial banks	8.49	40.70	178.13	228.53
	Rural credit cooperatives	0.28	0.11	0.44	0.19
	Foreign-invested banks	0.04	0.02	0.00	0.00
	Postal Saving Bank of China	0.12	0.14	5.65	5.81
	Others	0.31	1.54	1.95	5.21
	Total	969.99	1 939.59	969.99	1 939.59

Note: The data of urban credit cooperatives merged into the data of city commercial banks.

Transactions of Bankcards (continued)

Unit: 10 000 transactions/CNY 100 million

Transfer							
ATM				Counter			
Issuance		Acceptance		Issuance		Acceptance	
Volume	Value	Volume	Value	Volume	Value	Volume	Value
140 241.40	15 520.39	151 676.65	18 234.93	953.85	139.11	0.00	0.00
70 516.81	8 567.74	44 008.87	4 686.83	229.20	482.59	92.04	322.76
31 960.47	3 948.64	15 260.07	1 571.26	351.77	1 376.33	315.41	1 426.45
6 346.96	709.73	18 281.54	1 852.67	54.57	62.76	77.60	139.66
27 381.25	3 216.61	37 687.08	4 079.66	106.03	18.21	1 209.85	180.15
678.78	113.50	447.82	53.16	0.11	0.02	0.00	0.00
26 802.25	2 033.07	33 553.33	3 163.14	190.75	25.03	182.03	30.99
920.52	168.86	3 933.09	636.90	4.66	3.26	14.03	7.30
304 848.44	34 278.54	304 848.44	34 278.54	1 890.95	2 107.31	1 890.95	2 107.31

3. Statements of Bank Settlement Accounts

Table A7 Number of Bank Settlement

Type of accounts Bank	Local depositors					Non-local							
	Primary deposit accounts	General deposit accounts	Special deposit accounts	Temporary deposit accounts	Subtotal	Primary deposit accounts				General deposit accounts			
						Within the same city	Within the same province	Cross-province	Subtotal	Within the same city	Within the same province	Cross-province	Subtotal
Policy banks	4.60	4.01	6.74	0.05	15.40	0.16	0.01	0.00	0.17	0.65	1.64	0.28	2.57
State-owned commercial banks	1 183.17	401.13	162.44	5.10	1 751.85	13.38	2.32	0.99	16.69	24.07	14.05	14.56	52.68
Joint-stock commercial banks	216.42	215.22	20.17	0.74	452.55	2.43	0.63	0.56	3.62	19.47	19.12	13.37	51.96
City commercial banks	240.44	155.28	21.65	1.28	418.65	3.78	0.51	0.54	4.83	12.13	8.57	5.76	26.46
Rural commercial banks	121.08	34.31	7.63	0.22	163.24	1.07	0.23	0.07	1.38	2.18	1.18	0.83	4.19
Rural credit cooperatives	330.69	88.55	32.55	1.94	453.73	3.14	0.47	0.13	3.74	8.30	3.19	2.02	13.51
Foreign-invested banks	2.17	8.43	0.37	0.00	10.97	0.02	0.00	0.09	0.11	0.44	0.99	2.72	4.15
Postal Savings Bank of China	26.87	20.95	4.11	0.29	52.23	0.24	0.03	0.01	0.28	1.09	0.53	0.30	1.92
Others	5.95	12.43	0.75	0.08	19.20	0.10	0.02	0.00	0.12	1.12	0.41	0.20	1.73
Total	2 131.41	940.30	256.42	9.68	3 337.82	24.30	4.23	2.40	30.94	69.45	49.69	40.03	159.16

Accounts (by Bank)

Unit: 10 000 accounts

depositors									Individual bank accounts	Total
Special deposit accounts				Temporary deposit accounts				Subtotal		
Within the same city	Within the same province	Cross- province	Subtotal	Within the same city	Within the same province	Cross- province	Subtotal			
0.44	0.12	0.03	0.60	0.02	0.05	0.04	0.11	3.45	0.01	18.86
3.98	2.45	2.70	9.13	0.95	3.50	4.65	9.09	87.59	339 578.44	341 417.88
0.62	0.76	2.65	4.03	0.02	0.14	0.35	0.51	60.11	63 454.47	63 967.13
0.75	0.43	0.66	1.83	0.07	0.34	0.39	0.80	33.92	24 868.10	25 320.66
0.13	0.06	0.04	0.23	0.02	0.05	0.08	0.15	5.94	10 547.23	10 716.41
0.93	0.48	0.15	1.55	0.27	0.63	0.42	1.32	20.13	57 960.61	58 434.48
0.01	0.05	0.09	0.14	0.00	0.00	0.00	0.00	4.41	259.57	274.95
0.14	0.07	0.06	0.27	0.04	0.10	0.06	0.20	2.66	63 791.44	63 846.32
0.04	0.03	0.02	0.09	0.01	0.04	0.03	0.09	2.03	260.49	281.72
7.04	4.45	6.38	17.87	1.41	4.84	6.02	12.27	220.24	560 720.36	564 278.41

4. Statements of Securities Settlement

Table A8 Clearing Business of the

Month	Coupon payment and redemption of bonds		Central bank DVP	
	Volume	Value	Volume	Value
January	4 536	2 130.72	219	12 693.05
February	6 232	2 586.55	157	19 743.03
March	9 154	1 960.61	41	2 430.95
April	9 220	4 547.00	72	4 334.18
May	8 785	4 052.86	96	5 286.35
June	6 926	3 527.12	51	3 675.15
July	8 094	6 885.83	13	1 410.89
August	8 455	5 310.31	221	3 901.85
September	10 013	5 124.32	224	4 532.44
October	9 818	2 342.48	182	4 552.67
November	10 823	3 231.14	212	3 751.09
December	9 777	2 367.14	197	16 743.93
Total	101 833	44 013.61	1 685	83 055.58

Interbank Bond Market

Unit: Transaction/CNY 100 million

DVP among settlement members		Distribution DVP		Total	
Volume	Value	Volume	Value	Volume	Value
98 614	291 287.15	398	422.27	103 767	306 533.20
71 208	211 655.30	351	429.91	77 948	234 414.80
99 462	295 350.17	552	848.37	109 209	300 590.09
102 517	310 907.63	563	776.49	112 372	320 565.29
87 346	275 954.57	319	351.15	96 546	285 644.93
75 618	220 691.74	431	381.25	83 026	228 275.25
85 813	237 881.24	680	777.05	94 600	246 955.00
88 300	237 327.56	852	959.66	97 828	247 499.38
84 634	227 700.55	1 076	1 084.25	95 947	238 441.55
85 187	217 972.23	1 183	1 240.78	96 370	226 108.16
109 764	281 251.19	839	893.33	121 638	289 074.27
119 592	291 168.20	1 353	1 512.37	130 919	311 791.65
1 108 055	3 099 147.53	8 597	9 676.88	1 220 170	3 235 893.57

Table A9 Major Business of SD&C during 2012–2013

	2012	2013
Number of active accounts at the end of the period (10 000 accounts)	14 045.91	13 247.15
Number of share accounts at the end of the period (10 000 accounts)	17 064.47	17 517.64
Number of newly added share accounts (10 000 accounts)	556.21	492.90
Number of securities registered for custody (share)	4 094.00	5 069.00
Total par value of securities registered for custody (CNY 100 million)	46 926.57	56 128.92
Total market value of securities registered for custody (CNY 100 million)	245 131.10	262 027.53
Negotiable market value of securities registered for custody (CNY 100 million)	244 634.45	261 884.99
Tradable shares (CNY 100 million)	198 828.94	228 742.37
Tradable shares with restriction on sales (CNY 100 million)	45 805.51	33 142.62
Volume of transfers (10 000 transactions)	411 719.12	571 162.22
Value of transfers (CNY 100 million)	2 098 303.19	3 428 939.20
Gross settlement value (CNY 100 million)	2 381 239.65	3 553 006.35
Net settlement value (CNY 100 million)	98 557.99	136 242.21

Table A10 Account Business of SD&C during 2012–2013

Unit: 10 000 accounts

Item	2012	2013
Number of active accounts at the end of the period	14 045.92	13 247.15
Number of opened share accounts	17 872.35	18 366.56
Incl.: A-share accounts	17 615.81	18 108.39
B-share accounts	256.54	258.17
Number of cancelled share accounts	807.87	847.81
Incl.: A-share accounts	804.39	843.91
B-share accounts	3.48	3.90
Number of share accounts at the end of the period	17 064.48	17 517.64
Incl.: A-share accounts	16 811.42	17 263.38
B-share accounts	253.06	254.26
Number of dormant A-share accounts at the end of the period	3 018.56	4 270.49
Number of newly added share accounts	556.21	492.90
Incl.: A-share accounts	554.93	491.27
B-share accounts	1.28	1.63
Number of newly cancelled share accounts	38.64	39.94
Incl.: A-share accounts	38.25	39.52
B-share accounts	0.38	0.42

Table A11 Securities Registration and Custody with SD&C during 2012–2013

	2012	2013	Variance
I. Number of deposited securities	4 094	5 069	975
(I) Shares	2 579	2 575	–4
1. A-shares	2 472	2 469	–3
2. B-shares	107	106	–1
(II) Warrants	0	0	0
(III) Bonds	1 170	2 032	862
1. Treasury bonds	122	177	55
2. Local government bonds	3	6	3
3. Enterprise bonds	561	518	–43
4. Corporate bonds	358	980	622
5. Convertible bonds	23	27	4
6. Detachable convertible bonds	16	10	–6
7. Small-and-medium-size enterprise private placement bonds	87	314	227
(IV) Funds	330	436	106
1. Closed-end funds	52	37	–15
2. ETFs	50	85	35
3. LOFs	228	306	78
4. Real time Shanghai ransom money fund	0	8	8
(V) Asset securitization products	15	26	11
II. Par value of deposited securities (CNY 100 million)	46 926.58	56 128.92	9 202.34
(I) Shares	31 712.47	33 693.16	1 980.69
1. Tradable shares	24 851.25	30 266.31	5 696.24
A-shares	24 570.07	29 983.71	5 413.64
B-shares	281.18	282.60	1.42
2. Tradable shares with restriction on sales	6 781.25	3 418.46	–236.29
3. Non-tradable shares	79.97	8.39	–71.58
(II) Warrants	0.00	0.00	0.00
(III) Bonds	12 456.28	19 801.00	7 344.72
1. Treasury bonds	1 782.43	2 390.86	608.43
2. Local government bonds	3.30	16.70	13.40
3. Enterprise bonds	3 229.89	6 840.57	3 610.68
4. Corporate bonds	5 339.50	7 956.24	2 616.74
5. Convertible bonds	1 255.26	1 605.96	350.70
6. Detachable convertible bonds	752.15	598.35	–153.80
7. Small-and-medium-size enterprise private placement bonds	93.75	392.32	298.57
(IV) Closed-end funds	2 723.85	2 562.25	–161.60

continued

	2012	2013	Variance
1. Closed-end funds	807.42	580.01	-227.41
2. ETFs	1 281.71	1 075.75	-205.96
3. LOFs	634.72	679.17	44.45
4. Real time Shanghai ransom money fund	0.00	227.32	227.32
(V) Asset securitization products	33.98	72.51	38.53
III. Tradable market value of deposited securities (CNY 100 million)	198 828.93	228 745.99	29 917.06
(I) Shares	184 256.53	206 303.34	22 046.81
1. A-shares	182 677.51	204 637.95	21 960.44
2. B-shares	1 579.02	1 665.39	86.37
(II) Warrants	0.00	0.00	0.00
(III) Bonds	11 882.23	19 504.52	7 622.29
1. Treasury bonds	1 790.37	2 332.35	541.98
2. Local government bonds	3.30	16.70	13.40
3. Enterprise bonds	2 797.95	6 805.66	4 007.71
4. Corporate bonds	5 246.60	7 787.72	2 541.12
5. Convertible bonds	1 289.12	1 610.02	320.90
6. Detachable convertible bonds	714.72	580.98	-133.74
7. Small-and-medium-size enterprise private placement bonds	40.17	371.09	330.92
(IV) Funds	2 657.84	2 873.61	215.77
1. Closed-end funds	697.41	543.09	-154.32
2. ETFs	1 424.83	1 575.76	150.93
3. LOFs	535.60	560.77	25.17
4. Real time Shanghai ransom money fund	0.00	193.99	193.99
(V) Asset securitization products	32.33	64.52	32.19

Table A12 Settlement Business of SD&C during 2012–2013

Unit: CNY 100 million/%

		Shanghai Branch				Shenzhen Branch			
		Gross settlement value	Net settlement value	Settlement efficiency I	Settlement efficiency II	Gross settlement value	Net settlement value	Settlement efficiency I	Settlement efficiency II
2012	RMB	1 769 550.81	83 057.02	95.23	93.69	609 938.25	15 136.66	97.03	81.01
	USD	130.86	22.92	80.53	72.47	0.03	0.02	26.85	—
	HKD	—	—	—	—	1 136.65	269.90	76.26	—
2013	RMB	2 852 498.51	107 667.09	96.22	96.19	697 588.28	28 120.87	95.96	95.80
	USD	222.54	23.01	88.50	79.53	0.06	0.04	24.96	—
	HKD	—	—	—	—	1 920.70	388.75	79.76	—

Table A13 Fixed-income Product Business of SHCH during 2012–2013

	2012		2013	
	Volume (Number/transaction)	Value (CNY 100 million)	Volume (Number/transaction)	Value (CNY 100 million)
Bond issuance	1 248	18 934.54	2 000	27 845.02
The issuance of USD mid-term note	0	0.00	1	2.00(billion dollars)
Bond redemption	281	6 053.70	1 159	18 022.13
Bond settlement	93 471	77 392.83	88 752	56 287.01
Repurchase settlement	18 492	41 220.06	39 408	55 949.85
Pledge-style repo	16 213	39 815.27	34 606	52 825.03
Buyout repo	2 279	1 404.78	4 802	3 124.82
Forward settlement	15	24.00	1	1.00

5. Interpretations on Major Indicators in Payment Business Statements

Table A1 Structure of Payment Instruments

Volume and value of bank drafts and promissory notes refers to the volume and value of bank drafts and promissory notes with which the issuing bank debits the customers' accounts.

Volume and value of cheques refers to the volume and value of cheques with which the issuer's bank debits the customers' accounts.

Volume and value of commercial acceptance drafts: The volume and value of commercial acceptance drafts in the column of commercial draft means that of commercial acceptance drafts with which the acceptor's bank debits the customers' accounts, the volume and value of commercial acceptances in the column of collection means that of collections which are issued according to the commercial acceptance drafts.

Volume and value of banker's acceptance drafts: The volume and value of banker's acceptance drafts in the column of commercial draft means that of acceptance drafts with which the bank debits the customers' accounts, the volume and value of banker's acceptance drafts in the column of collection means that of collections which are issued according to the banker's acceptance drafts.

Volume and value of domestic letters of credit refer to the volume and value of domestic letters of credit with which the issuing bank debits the customers' accounts.

Volume and value of remittance refer to the volume and value of remittances with which the

remitting bank debits the customers' accounts.

Table A2 Annual Statement of Bankcard Business

Volume of bankcards refers to the volume of bankcards which are available for payment transactions at the statistical period, except for those unavailable because of cancellation, suspension and not being activated etc..

Volume of bankcards issued in the current period refers to the net volume of bankcards increased in the current period, including principal cards and supplementary cards, but not replaced cards and renewed cards.

Volume and value of cash deposits refer to the volume and value of bankcard deposits through ATM, counter and other facilities.

Volume and value of cash withdrawals refer to the volume and value of bankcard withdrawals through ATM, counter and other facilities.

Volume and value of consumptions refer to the volume and value of bankcard consumptions through POS terminal.

Volume and value of transfers refer to the volume and value of bankcard transfers through ATM and counter.

Table A4 Annual Statement of Local Bill Clearing Business

Gross value payable is the sum of credit bills presented and debit bills received during each clearing session by the clearing bank.

Gross value receivable is the sum of debit bills presented and credit bills received during each clearing session by the clearing bank.

Table A5 Payment Business of Intra-bank Payment Systems of Banking Financial Institutions

Intra-bank payment systems refer to the systems owned by banking institutions for processing payment business.

Debit and credit refer to the debit and credit business originated by banking institutions through their proprietary payment systems.

Table A6 Annual Statement of Interbank Transactions of Bankcards

Cash deposit refers to the interbank deposit business originated through ATM or counter.

Issuance: Issuance in the column of cash deposit and cash withdrawal refers to the cash transactions originated with the bank's cards through other banks' ATMs and counters, issuance in the column of transfer means the transfer transactions originated with the bank's cards through other bank's ATMs and counters, issuance in the column of POS consumption means the POS consumptions originated with the bank's bankcards exchanged through bankcard clearing organizations.

Acceptance refers to the transactions handled at the ATM or counter of a bank for the bankcards of other banks.

Acquiring refers to the POS consumptions accepted by the acquiring institution for bankcards of other banks.

Table A8 Clearing Business of the Interbank Bond Market

Central bank DVP refers to the DVP fund settlement between the central bank and the tier-1 traders of the open market.

Table A9 Major Business of SD&C during 2012–2013

Number of newly added share accounts and number of share accounts at the end of the period include A-share and B-share accounts.

Statistics on the number, total par value and total market value of securities registered for custody covers the securities issued and registered by SD&C but having not been tradable on the exchanges and those delisted from exchanges but having not gone through delisting procedures by SD&C, total par value and total market value exclude the non-tradable shares of listed companies with only B-shares.

Total market value and negotiable market value are calculated by the closing prices at the end of the period, tradable shares include the shares going through joint-stock reform and with restriction on sales, the same as below.

Volume and value of transfers include centralized and non-centralized transfers of all registered securities, and are calculated in a two-way manner. Bond transfer value is calculated at the full price.

Exchange rate adopts the average of daily exchange rate of December published by the State Administration of Foreign Exchange.

Data in the table are the sum of those of SSE and SZSE.

Securities include A-shares, B-shares, warrants, treasury bonds, enterprise bonds, corporate bonds, convertible bonds, detachable convertible bonds, small-and-medium-size enterprise private placement bonds, closed-end funds, ETFs, LOFs and asset securitization products, but open-ended funds and treasury bond repurchases are excluded.

Table A10 Account Business of SD&C during 2012–2013

Number of dormant accounts is the number of dormant accounts verified and declared by securities companies according to *Circular of China Securities Regulatory Commission concerning Proper Account Standardization for Third Party Depository of the Settlement Funds of Customers of Securities Companies* and *Circular on Further Standardizing Account Management* issued by SD&C.

Table A11 Securities Registration and Custody with SD&C during 2012–2013

Par value is the par value of tradable and non-tradable shares of listed companies, excluding the par value of non-tradable shares of listed companies which issued B-shares only.

Tradable market value is calculated by multiplying the registered number of securities and the market value at the time of statistics collection, the market value of B-shares shall be converted into RMB according to the average exchange rate of the current month published by SAFE.

Data in the table are the sum of those of SSE and SZSE.

Table A12 Settlement Business of SD&C during 2012–2013

Gross settlement value is the sum of absolute value of receivables and payables of all settlement items in the statistical period calculated by currency.

Net settlement value is the sum of the absolute value of netted receivables and payables of each settlement reserve account on each day of the statistical period.

RMB settlement efficiency: Efficiency I = $1 - \text{net settlement value in the secondary market} / \text{gross settlement value in the secondary market}$, efficiency II = $1 - (\text{net settlement value in the secondary market} + \text{gross settlement value in the primary market}) / \text{gross settlement value}$.

USD settlement efficiency: Efficiency I = $1 - \text{net settlement value in netting} / \text{gross settlement value in netting}$, efficiency II = $1 - (\text{net settlement value in net delivery} + \text{gross settlement value in delivery trade for trade}) / \text{gross settlement value}$.